

#### INTER-OFFICE CORRESPONDENCE

April 3, 2017

SUBJECT: BOARD MEETING AGENDA

FROM: Melissa Charleroy and Cheryl Mock, JEA Executive Assistants

**TO:** All Members, JEA Board of Directors

Scheduled times and locations for JEA meetings to be held *Tuesday, April 18, 2017,* are as follows:

### 12:00 PM Board Meeting 19th Floor, JEA Tower

We are looking forward to seeing you on the 18<sup>th</sup>. Please call Melissa Charleroy at 665-7313 or Cheryl Mock at 665-4202 if you require additional information.

J. Gutos

J. Gabriel, OGC

#### /mmc

CC:

P. McElroy	M. Hightower	S. Tuten	W. Stanford
J. Brooks	T. Hobson	M. Charleroy	M. Evans
M. Brost	B. Roche	C. Mock	V. Wright
P. Cosgrave	R. Vento	B. Taylor	L. Bartley
M. Dykes	J. Upton	M. Ruiz-Adams	S Datz
A. Hiers	G. Boyce	D. Swain	J. Bryant

#### e-copy:

Patrick Maginnis Brandon Edwards Security Desk Security Office Brandi Sneed Russell Park Ted Delay Timothy Chrisp

# JEA BOARD AGENDA

**DATE:** April 18, 2017

**TIME:** 12:00 PM

PLACE: JEA

21 West Church Street

19<sup>th</sup> Floor

### I. WELCOME

- A. Call to Order
- B. Time of Reflection
- C. Pledge to Flag
- D. Adoption of the Agenda
- E. Safety Briefing
- F. Sunshine Law/Public Records Statement Jody Brooks, Chief Legal Officer

## II. PRESENTATIONS AND COMMENTS

- A. Comments from the Public
- B. Council Liaison's Comments Greg Anderson
- C. Office of the Mayor Liaison's Comments Dr. Johnny Gaffney
- D. Nassau County's Ex-Officio Representative's Comments Mike Mullin

## III. FOR BOARD CONSIDERATION

- A. Consent Agenda The Consent Agenda consists of agenda items that require Board approval but are routine in nature, or have been discussed during previous public meetings of the Board. The Consent Agenda items require no explanation, discussion or presentation, and are approved by one motion and vote.
  - 1. Approval of Board Meeting Minutes March 21, 2017 action
  - 2. Real Estate Acquisition Status Report information
  - 3. Monthly JEA Financial Statements information

- 4. Monthly Operational and Financial Presentation information
- 5. Monthly JEA Operations Report information
- 6. Monthly FY17 Communications & Engagement Calendar and Plan Update information

### B. Strategic Discussions/Action

- JEA FY2016 Annual Disclosure Reports Jody Brooks, Chief Legal Officer 5 minutes – presentation/action
- 2. Annual Report on JEA's Jacksonville Small & Emerging Business (JSEB)
  Program John McCarthy, Director, Supply Chain Management 10 minutes
   presentation/information
- 3. Sole Source and Emergency Procurement/Procurement Appeals Board Report John McCarthy, Director, Supply Chain Management 5 minutes presentation/information
- 4. Quarterly Financial Report Melissa Dykes, Chief Financial Officer 10 minutes presentation/information
- 5. JEA Sewer System: Framework to Resiliency Analyze, Plan and Implement Improvement Activities Brian Roche, Vice President/General Manager, Water/Wastewater Systems 15 minutes presentation/information
- 6. Electric System Ten Year Site Plan Steve McInall, Director, Electric Production Resource Planning presentation/information
- C. Open Discussion
- D. Other New Business
- E. Old Business none

## IV. <u>REPORTS</u>

- A. Managing Director/CEO's Report
- B. Chair's Report

# V. <u>CLOSING CONSIDERATIONS</u>

- A. Announcements Next Board Meeting May 16, 2017
- B. Adjournment

**Board Calendar** 

**Board Meetings**: 12:00 PM – Third Tuesday of Every Month

**Committees** 

Finance & Audit Committee: May 8, 2017 – 8:00 AM

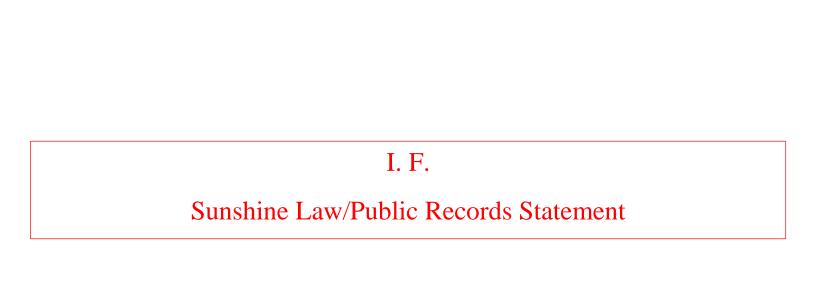
August 14, 2017 – 8:00 AM December 5, 2017 – 12:00 PM

Compensation Committee: TBD

Government Affairs Committee: TBD

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

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



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

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



### JEA BOARD MINUTES March 21, 2017

The JEA Board met in regular session on Tuesday, March 21, 2017, on the 19<sup>th</sup> Floor, 21 W. Church Street, Jacksonville, Florida. Present were Tom Petway, Ed Burr, Delores Kesler, Frederick Newbill and Alan Howard. Kelly Flanagan and Husein Cumber were absent and excused.

#### Agenda Item I - Welcome

- **A.** The meeting was **called to order** at 12:00 PM by Chair Petway.
- **B.** A **Moment of Reflection** was observed by all.
- **C.** The **Pledge of Allegiance** was led by Chair Petway.
- **D. Adoption of Agenda** The amended agenda was approved on **motion** by Vice Chair Burr and second by Secretary Kesler.
- **E.** The **Safety Briefing** was given by Paul McElroy, Managing Director/Chief Executive Officer.
- **F.** Sunshine Law/Public Records Statement Jody Brooks, Chief Legal Officer, stated this Board Meeting is being held in compliance with Florida's Government in the Sunshine Law, §286.011. The complete statement can be found in section I. F. of the Board package.

#### **Agenda Item II – Presentations and Comments**

- **A.** Comments from the Public none
- **B.** Council Liaison's Comments Council Member Greg Anderson advised of two JEA items in current legislation: Ordinance 2017-171, which is the reappointment of Ed Burr to the JEA Board of Directors and Ordinance 2016-764, which corresponds to JEA Resolution 2017-29 on which the Board is voting to amend the JEA charter regarding frequency of Board meetings.
- C. Office of the Mayor Liaison's Comments Dr. Gaffney advised that the mayor appreciates the work and support of JEA during this year's negotiations.
- **D.** Nassau County's Ex-Officio Representative's Comments Mr. Mullin was not in attendance.
- E. Resolution 2017-30 To Highlight and Support April as Florida's Water Conservation Month Paul Steinbrecher, Director, Permitting & Regulatory Conformance, advised the Board of JEA's water conservation activities and requested the Board approve a resolution showing JEA's support of April as Florida's Water Conservation Month. On motion by Secretary Kesler and second by Mr. Howard, Resolution 2017-30 was unanimously approved.

#### Agenda Item III - For Board Consideration

- **A.** Consent Agenda used for items that require no explanation, discussion or presentation and are approved by one motion and vote. On **motion** by Vice Chair Burr and second by Secretary Kesler, item 1 on the Consent Agenda was unanimously approved and items 2 through 4 were received for information.
  - 1. Approval of Board Meeting Minutes February 21, 2017 approved

- 2. Monthly JEA Financial Review & Statements received for information
- 3. Monthly JEA Operations Report received for information
- 4. Monthly FY17 Communications & Engagement Calendar and Plan Update received for information

#### **B.** Strategic Discussions/Action

- 1. Resolution 2017-29 To Request That The City of Jacksonville Amend JEA Charter Regarding Board Meeting Requirements Jody Brooks, Chief Legal Officer, presented a copy of the resolution to modify the language of JEA's prior resolution to amend the JEA Charter regarding Board meeting frequency to generally once a month rather than monthly. On **motion** by Vice Chair Burr and second by Mr. Newbill, Resolution 2017-29 was unanimously approved.
- 2. JEA Supervisors Association, Inc. (JSA) Collective Bargaining Agreement Paul McElroy, Managing Director/CEO, presented to the Board the ratified agreement between JEA and JSA and requested that the Board approve the agreement and its presentation to City Council. On **motion** by Secretary Kesler and second by Vice Chair Burr, the Board unanimously approved the ratified agreement between JEA and JSA.
- 3. American Federation of State, County and Municipal Employees (AFSCME)
  Council 79 Collective Bargaining Agreement Paul McElroy, Managing
  Director/CEO, presented to the Board the ratified agreement between JEA and
  AFSCME and requested that the Board approve the agreement and its presentation to
  City Council. On **motion** by Vice Chair Burr and second by Secretary Kesler, the
  Board unanimously approved the ratified agreement between JEA and AFSCME.
- 4. JEA Disclosure Policies and Procedures Review Refresher Jody Brooks, Chief Legal Officer, provided the Nixon Peabody refresher disclosure training to the Board, to support continued compliance with JEA's disclosure policies and procedures. This item was received for information.
- 5. JEA FY2016 Annual Disclosure Reports Jody Brooks, Chief Legal Officer, advised the Board of the draft annual disclosure reports that are available for their review. Prior to requesting approval at the April 18, 2017 Board meeting, staff has scheduled time for discussions with Board Members, if necessary. Ms. Brooks advised bond counsel is available for questions, and copies of the reports would be placed in their offices. This item was received for information.
- 6. Electric Generation Planning Mike Brost, Vice President/General Manager, Electric Systems, presented information to the Board regarding the agreement with Florida Power & Light (FPL) to decommission the St. Johns River Power Park (SJRPP). FPL will pay JEA to terminate the Power Purchase Agreement (PPA) early and will be responsible for its pro-rata share of environmental remediation, pension and employee severance benefits. Mr. Brost acknowledged Melissa Dykes' for her leadership on this project, her team for their work, Mary Guyton-Baker from Electric Systems, Mike Hightower and his team in Public Affairs and Angie Hiers and her team in Human Resources. Mr. Brost provided a history of SJRPP and its 50% decline in production since 2007. Mr. Brost commended the past and current SJRPP employees for their work and dedication. Mr. Brost provided the benefits of this transaction, the potential for economic development of the 1,500 acre site, the employee impact of the transaction and the risks and considerations of the entirety of

- this project. Mr. Brost further advised the Board of the next steps, including filings with regulatory agencies and approval of definitive agreements. While this item was received for information, Mr. McElroy stated he would be executing a term-sheet for this transaction after the Board meeting.
- 7. Monthly Operational and Financial Review Paul McElroy, Managing Director/Chief Executive Officer, presented the monthly review of JEA's operational and financial metrics for electric and water/wastewater services. This item was received for information.

#### C. Open Discussion

Chair Petway indicated it has been a pleasure to work with this Board, including Ms. Flanagan and Mr. Cumber. Chair Petway also indicated that it has been a humbling and surprising experience to work with JEA staff and to learn about the business.

#### **D.** Other New Business

- 1. Mr. McElroy provided the Board with an overview of the ratified agreement with the Professional Employees Association (PEA), which was received after the Board package had been completed. As with the previous bargaining unit agreements, it is requested that the Board approve the ratified agreement and its presentation to City Council. On **motion** by Secretary Kesler and second by Mr. Newbill, the item was unanimously approved.
- 2. Mr. McElroy presented the International Brotherhood of Electrical Workers (IBEW) had a tentative agreement with management, which was taken to vote and was rejected. Mr. McElroy advised the Board that a new tentative agreement was reached on Monday, March 20, 2017 and would be presented to the members for a vote on Thursday, March 23, 2017. Mr. McElroy indicated that it is requested if the agreement is ratified with its current wage increases, he be allowed to approve and forward to City Council on the Board's behalf. On **motion** by Vice Chair Burr and second by Mr. Newbill, the item was unanimously approved.
- 3. Mr. McElroy advised the Board of a tentative agreement with Laborers' International Union of North America (LIUNA), after a previously rejected agreement with the bargaining unit membership. Mr. McElroy requested that, if the agreement is ratified prior to the end of the city's legislative filing deadline of March 27, 2017, he be allowed to approve and forward to City Council on the Board's behalf. On **motion** by Vice Chair Burr and second by Secretary Kesler, the amended motion allowing Mr. McElroy to approve the plan as long as the cost remains at approximately \$4.2 million and to forward it to City Council.

#### E. Old Business – none

#### **Agenda Item IV – Reports**

- **A. Finance and Audit Committee Report** Joe Orfano, Treasurer, reviewed the Finance & Audit Committee meeting of March 13, 2017, bringing items to the Board for review and approval.
  - 1. Approval of Minutes December 1, 2016 received for information
  - 2. FY2018 Budget Assumptions Ryan Wannemacher, Director, Financial Planning & Analysis reviewed the key strategic issues, risks, major challenges and assumptions for the FY2018 budget and advised the Board that the information provided did not

include results from the SJRPP plant closure but that the final budget would reflect changes.

- 3. JEA Annual Disclosure Policy Report received for information
- 4. Ernst & Young FY2016 Revised Management Letter received for information
- 5. Audit Services
  - a. Quarterly ERM/Audit Update received for information
  - b. Finance & Audit Committee Members Self-Assessment Survey Questionnaire received for information
- 6. Cyber Security Activities received for information
- 7. CIP Compliance Update received for information
- 8. Ethics Officer Report received for information
- 9. JEA Energy Market Risk Management Policy Report received for information
- 10. Resolution Determining the Sufficiency of Revenues St. Johns River Power Park Mr. Orfano presented the resolution for approval. Upon **motion** by Secretary Kesler and second by Mr. Newbill, the item was unanimously approved.
- 11. Recap of Recent JEA Electric System Fixed Rate Debt Refunding Delegated Transactions received for information
- 12. Electric System and Water and Sewer System Reserve Fund Quarterly Report received for information
- 13. Announcements
  - a. Next Meeting May 8, 2017, 8:00-10:00 AM
- 14. Committee Discussion Sessions
  - a. Director, Audit Services
  - b. Ernst & Young
  - c. Council Auditor's Office

#### B. Nominating Committee Report – Tom Petway, Committee Chair

- 1. Approval of Nominating Committee Minutes January 27, 2017 upon **motion** by Vice Chair Burr and second by Mr. Howard, the item was unanimously approved.
- 2. New Slate of Officers Chair Petway presented the Board with the following slate of officers for approval, Ed Burr as Board Chair, Alan Howard as Vice Chair and Delores Kesler for a second term as Secretary upon **motion** by Mr. Newbill and second by Secretary Kesler, the new slate of officers was unanimously approved.

#### C. Managing Director/CEO's Report

- 1. Mr. McElroy thanked Mr. Petway for his service as Board Chair and indicated that he is looking forward to working with Mr. Burr.
- 2. Mr. McElroy advised the Board that JEA is working with Nassau County assisting with their growth and planning for the future.
- 3. Mr. McElroy indicated that JEA may need to ramp up the One Water campaign to further advance water conservation.

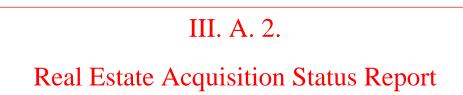
**D.** Chair's Report – no additional information provided

### <u>Agenda Item V – Closing Considerations</u>

- **A. Announcements** Next Board Meeting April 18, 2017
- B. Adjournment

With no further business claiming the attention of the Board, Chair Petway adjourned the meeting at 1:33 PM.

APPROVED BY:		
	SECRETARY	
	DATE:	
Board Meeting recorded by:		
Cheryl W. Mock Executive Assistant	_	





March 23, 2017

SUBJECT:	SUBJECT: REAL ESTATE ACQUISITION STATUS REPORT											
Purpose:		Action Required	Advice/Direction									
	e the JEA Board of Directors with a Authority has previously been gra											
Significance:	Timely acquisition of property right	s provides for continued serv	ice reliability.									
Effect: Proper	rty owners whose real property is in	mpacted by specific JEA work	ζ.									
	fit: The cost to acquire property righte legal and other fees and expension	• •	ed by certified appraisals									
Recommende informational p	ed Board action: No action require ourposes only.	ed. The Real Estate Acquisiti	on Status Report is for									
For additional	I information, contact: Hamid Zah	nir, 665-6068										

Submitted by: PEM/MHD/HAZ/DLB



#### **Commitments to Action**





#### INTER-OFFICE MEMORANDUM

March 23, 2017

SUBJECT: REAL ESTATE ACQUISITION STATUS REPORT

FROM: Paul E. McElroy, Managing Director/CEO

**TO:** JEA Board of Directors

#### **BACKGROUND:**

The JEA Board of Directors periodically grants the use of Condemnation Authority for specific work which is critical to JEA's operations. This authority provides for property rights to be acquired in a timely manner which ensures continued service reliability. Every effort is made to negotiate a settlement before proceeding with this action.

#### **DISCUSSION:**

The Real Estate Acquisition Status Report is submitted to the Board on a quarterly basis, and is intended to provide the Board with an overview of activities for which Condemnation Authority has been granted. There is no new condemnation activity at this time.

#### **RECOMMENDATION:**

No action is required. The Real Estate Acquisition Status Report is for informational purposes only.

Paul E. McElroy, Managing Director/CEO

PEM/MHD/HAZ/DLB





Monthly Financial Statements

March 2017

#### Monthly Financial Statements

#### March 2017

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•		2017	2016
Assets			_
Current assets:			
Cash and cash equivalents	\$	293,763	\$ 275,428
Investments		238,711	235,352
Customer accounts receivable, net of allowance			
(\$2,282 in 2017 and \$4,113 in 2016)		152,862	162,824
Miscellaneous accounts receivable		28,439	26,388
Interest receivable		1,659	1,678
Inventories:			
Fuel inventory - Electric System		70,821	79,007
Fuel inventory - Plant Scherer		5,083	6,051
Materials and supplies - Water and Sewer		46,566	43,528
Materials and supplies - Electric System		20,561	20,184
Materials and supplies - Plant Scherer		2,109	2,091
Total current assets		860,574	852,531
Noncurrent assets:			
Restricted assets:			
Cash and cash equivalents		65,385	70,898
Investments		861,708	844,938
Accounts and interest receivable		4,082	3,782
Total restricted assets		931,175	919,618
Costs to be recovered from future revenues		459,177	453,944
Investment in The Energy Authority		6,168	6,431
Other assets	-	20,753	17,459
Total noncurrent assets		1,417,273	1,397,452
Capital accate:			
Capital assets:  Land and easements		191,196	164,176
Plant in service		10,869,028	10,735,473
Less accumulated depreciation		(5,602,267)	(5,261,985)
Plant in service, net		5,457,957	5,637,664
Construction work in progress		364,234	225,912
Net capital assets	-	5,822,191	5,863,576
Total assets		8,100,038	8,113,559
		, ,	
Deferred outflows of resources			
Unamortized deferred losses on refundings		140,699	148,114
Accumulated decrease in fair value of interest hedging derivatives		119,614	167,867
Unrealized pension contributions and losses		137,010	83,969
Accumulated decrease in fair value of fuel hedging derivatives		175	5,253
Total deferred outflows of resources		397,498	 405,203
Total assets and deferred outflows of resources	\$	8,497,536	\$ 8,518,762

	2017	2016
Liabilities		
Current liabilities:		
Accounts and accrued expenses payable	\$ 75,922	\$ 75,595
Customer deposits	56,365	55,542
City of Jacksonville payable	9,676	9,541
Compensated absences due within one year	3,527	4,534
State utility taxes payable	2,076	2,231
Total current liabilities	147,566	147,443
Current liabilities payable from restricted assets:		
Debt due within one year	229,095	181,525
Renewal and replacement reserve	80,534	79,931
Interest payable	81,127	86,734
Construction contracts and accounts payable	27,390	11,154
Total current liabilities payable from restricted assets	 418,146	359,344
Noncurrent liabilities:		
Net pension liability	493,346	408,629
Compensated absences due after one year	25,345	23,816
Environmental liabilities	18,556	18,662
Other liabilities	3,923	6,940
Total noncurrent liabilities	 541,170	458,047
	 0,	
Long-term debt:		
Bonds and commercial paper payable, less current portion	4,178,295	4,470,195
Unamortized premium, net	126,965	154,651
Fair value of debt management strategy instruments	 119,614	167,867
Total long-term debt	 4,424,874	4,792,713
Total liabilities	 5,531,756	5,757,547
Deferred inflows of resources		
Revenues to be used for future costs	492,827	508,675
Unrealized pension gains	12,683	29,796
Total deferred inflows of resources	 505,510	538,471
Total deletted littlows of resources	 303,310	330,471
Net position		
Net investment in capital assets	1,646,529	1,423,663
Restricted	478,574	467,686
Unrestricted	335,167	331,395
Total net position	 2,460,270	2,222,744
Total liabilities, deferred inflows of resources, and net position	\$ 8,497,536	\$ 8,518,762

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

	Electric Syster and Bulk Powe Supply System	r	SJRPP System	Elimination of Intercompany transactions	Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	District Energy System Fund	Total JEA
Assets			-					
Current assets:								
Cash and cash equivalents	\$ 177,220		32,409	\$ -	\$ 209,629	79,830	\$ 4,304	\$ 293,763
Investments	232,750		5,961	-	238,711	-	-	238,711
Customer accounts receivable, net of allowance (\$2,282)	118,103		-	-	118,103	34,452	307	152,862
Miscellaneous accounts receivable	27,824		22,690	(22,464)	28,050	389	-	28,439
Interest receivable	960		10	-	970	689	-	1,659
Inventories:								
Fuel inventory - Electric System	34,193		36,628	-	70,821	-	-	70,821
Fuel inventory - Plant Scherer	5,083		-	-	5,083	-	-	5,083
Materials and supplies - Water and Sewer	-		=	=	-	46,566	-	46,566
Materials and supplies - Electric System	-		20,561	=	20,561	-	-	20,561
Materials and supplies - Plant Scherer	2,109		-	=	2,109	=	=	2,109
Total current assets	598,242		118,259	(22,464)	694,037	161,926	4,611	860,574
Noncurrent assets:								
Restricted assets:								
Cash and cash equivalents	263		39,719	-	39,982	22,137	3,266	65,385
Investments	314,256	;	212,354	-	526,610	335,098	-	861,708
Accounts and interest receivable	2,301		780	=	3,081	1,001	-	4,082
Total restricted assets	316,820	1	252,853	-	569,673	358,236	3,266	931,175
Costs to be recovered from future revenues	240,476	;	6,840	-	247,316	211,861	-	459,177
Investment in The Energy Authority	6,168		-	-	6,168	-	-	6,168
Other assets	13,729		-	-	13,729	7,017	7	20,753
Total noncurrent assets	577,193		259,693	-	836,886	577,114	3,273	1,417,273
Capital assets:								
Land and easements	121,711		6,660	-	128,371	59,774	,	191,196
Plant in service	5,185,253		1,339,885	-	6,525,138	4,288,650	,	10,869,028
Less accumulated depreciation	(2,777,516	5)	(860,644)	-	(3,638,160)			(5,602,267)
Plant in service, net	2,529,448		485,901	-	3,015,349	2,407,218		5,457,957
Construction work in progress	199,433	,	12,525	-	211,958	152,146		364,234
Net capital assets	2,728,881		498,426	-	3,227,307	2,559,364	35,520	5,822,191
Total assets	3,904,316	i	876,378	(22,464)	4,758,230	3,298,404	43,404	8,100,038
Deferred outflows of resources								
Unamortized deferred losses on refundings	82,296		13,088	=	95,384	45,108	207	140,699
Accumulated decrease in fair value of interest hedging derivatives	97,781		-	=	97,781	21,833	=	119,614
Unrealized pension contributions and losses	77,673		11,731	-	89,404	47,606		137,010
Accumulated decrease in fair value of fuel hedging derivatives	175		-	-	175	-	-	175
Total deferred outflows of resources	257,925	i	24,819	-	282,744	114,547	207	397,498
Total assets and deferred outflows of resources	\$ 4,162,241	\$	901,197	\$ (22,464)	\$ 5,040,974	\$ 3,412,951	\$ 43,611	\$ 8,497,536

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

	Electric System and Bulk Power Supply System	SJRPP System	Inte	mination of ercompany nsactions	Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	E <sub>I</sub>	istrict nergy /stem fund	То	otal JEA
Liabilities										
Current liabilities:										
Accounts and accrued expenses payable	\$ 51,683	\$ 12,698	\$	(189)	\$ 64,192	\$ 11,717	\$	13	\$	75,922
Customer deposits	41,839	-		-	41,839	14,526		-		56,365
City of Jacksonville payable	7,689	-		-	7,689	1,987		-		9,676
Compensated absences due within one year	2,025	660		-	2,685	811		31		3,527
State utility taxes payable	2,076	-			2,076	-		-		2,076
Total current liabilities	105,312	13,358		(189)	118,481	29,041		44		147,566
Current liabilities payable from restricted assets:										
Debt due within one year	135,105	41,330		-	176,435	51,020		1,640		229,095
Renewal and replacement reserve	-	80,534		-	80,534	-				80,534
Interest payable	39,249	9,571		-	48,820	31,616		691		81,127
Construction contracts and accounts payable	9,888	23,719		(22,275)	11,332	16,020		38		27,390
Total current liabilities payable from restricted assets	184,242	155,154		(22,275)	317,121	98,656		2,369		418,146
Noncurrent liabilities:										
Net pension liability	297,819	12,993		-	310,812	182,534		-		493,346
Compensated absences due after one year	16,887	1,748		-	18,635	6,689		21		25,345
Environmental liabilities	18,556	-		-	18,556	-		-		18,556
Other liabilities	2,921	-		-	2,921	1,002		-		3,923
Total noncurrent liabilities	336,183	14,741		-	350,924	190,225		21		541,170
Long-term debt:										
Bonds and commercial paper payable, less current portion	2,171,305	408,885		-	2,580,190	1,561,620		36,485	4	,178,295
Unamortized premium (discount), net	63,267	14,010		-	77,277	49,729		(41)		126,965
Fair value of debt management strategy instruments	97,781	-		-	97,781	21,833		-		119,614
Total long-term debt	2,332,353	422,895		-	2,755,248	1,633,182		36,444		,424,874
Total liabilities	2,958,090	606,148		(22,464)	3,541,774	1,951,104		38,878	5	5,531,756
Deferred inflows of resources										
Revenues to be used for future costs	316,849	153,631		-	470,480	22,347		-		492,827
Unrealized pension gains	6,545	2,126		-	8,671	4,012		-		12,683
Total deferred inflows of resources	323,394	155,757		-	479,151	26,359		-		505,510
Net position				-						
Net investment in capital assets	467,452	19,825		-	487,277	1,161,647		(2,395)		,646,529
Restricted	212,139	16,314		22,275	250,728	225,272		2,574		478,574
Unrestricted	201,166	103,153		(22,275)	282,044	48,569		4,554		335,167
Total net position	880,757	139,292		-	1,020,049	1,435,488		4,733		2,460,270
Total liabilities, deferred inflows of resources, and net position	\$ 4,162,241	\$ 901,197	\$	(22,464)	\$ 5,040,974	\$ 3,412,951	\$	43,611	\$8	3,497,536

JEA Combining Statement of Net Position (in thousands - unaudited) March 2016

	Electric System and Bulk Power Supply System		SJRPP System	Elimination of Intercompany transactions		Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	District Energy System Fund	Total JEA
Assets									
Current assets:									
Cash and cash equivalents	\$ 179,259	\$	28,988	\$ -	- 5	\$ 208,247	\$ 63,106	\$ 4,075	\$ 275,428
Investments	228,431		6,921	-	-	235,352	-	-	235,352
Customer accounts receivable, net of allowance (\$4,113)	129,330		-	-	-	129,330	33,148	346	162,824
Miscellaneous accounts receivable	21,615		24,123	(19,815	5)	25,923	465	-	26,388
Interest receivable	1,019		12	-	-	1,031	647	-	1,678
Inventories:									
Fuel inventory - Electric System	30,117		48,890	-	-	79,007	-	-	79,007
Fuel inventory - Plant Scherer	6,051		-	-	-	6,051	-	-	6,051
Materials and supplies - Water and Sewer	-		-	-	-	-	43,528	-	43,528
Materials and supplies - Electric System	-		20,184	-	-	20,184	-	-	20,184
Materials and supplies - Plant Scherer	2,091		-	-	-	2,091	-	-	2,091
Total current assets	597,913		129,118	(19,815	5)	707,216	140,894	4,421	852,531
Noncurrent assets: Restricted assets:									
Cash and cash equivalents	141		41,001	-	-	41,142	25,781	3,975	70,898
Investments	327,556		210,084	-	-	537,640	307,298	-	844,938
Accounts and interest receivable	1,084		982	-	-	2,066	1,716	-	3,782
Total restricted assets	328,781		252,067	-	-	580,848	334,795	3,975	919,618
Costs to be recovered from future revenues	228,702		6,854	-	_	235,556	218,388	=	453,944
Investment in The Energy Authority	6,431		, <u>-</u>	-		6,431	, <u>-</u>	-	6,431
Other assets	10,113		_	-		10,113	7,346	-	17,459
Total noncurrent assets	574,027		258,921	-	-	832,948	560,529	3,975	1,397,452
Capital assets:									
Land and easements	95,177		6,660	_		101,837	59,288	3,051	164,176
Plant in service	5,141,735		1,355,440	_	_	6,497,175	4,184,679	53,619	10,735,473
Less accumulated depreciation	(2,593,943)	)	(832,336)	-	-	(3,426,279)	(1,815,036	,	(5,261,985)
Plant in service, net	2,642,969		529,764	-		3,172,733	2,428,931	36,000	5,637,664
Construction work in progress	96,450		17.661	-		114,111	111.581	220	225,912
Capital assets, net	2,739,419		547,425	-		3,286,844	2,540,512	36,220	5,863,576
Total assets	3,911,359		935,464	(19,815	5)	4,827,008	3,241,935	44,616	8,113,559
Deferred outflows of resources									
Unamortized deferred losses on refundings	82,557		17,652	<u>-</u>	_	100,209	47,690	215	148,114
Accumulated decrease in fair value of interest hedging derivatives	135,571			-	_	135,571	32,296	213	167,867
Unrealized pension contributions and losses	48,712		4,114	-	_	52,826	31,143	_	83,969
Accumulated decrease in fair value of fuel hedging derivatives	5,253			-	_	5,253	-	_	5,253
Total deferred outflows of resources	272,093		21,766			293.859	111,129	215	405,203
Total assets and deferred outflows of resources	\$ 4,183,452	\$	957,230	\$ (19,815	5) (	\$ 5,120,867	\$ 3,353,064		\$ 8,518,762

JEA Combining Statement of Net Position (in thousands - unaudited) March 2016

	Syst Bulk	ectric em and Power y System	SJRPP System	Inte	mination of ercompany	Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	Er Sy	strict ergy stem und	То	otal JEA
Liabilities		, .,									
Current liabilities:											
Accounts and accrued expenses payable	\$	46,772	\$ 18,647	\$	(739)	\$ 64,680	\$ 10,904	\$	11	\$	75,595
Customer deposits		41,563	_		-	41,563	13,979		-		55,542
City of Jacksonville payable		7,643	_		-	7,643	1,898		-		9,541
Compensated absences due within one year		1,824	1,486		-	3,310	1,217		7		4,534
State utility taxes payable		2,231	-		-	2,231	· -		-		2,231
Total current liabilities		100,033	20,133		(739)	119,427	27,998		18		147,443
Current liabilities payable from restricted assets:											
Debt due within one year		102,240	43,785		_	146,025	33,875		1,625		181,525
Renewal and replacement reserve		-	79,931		_	79,931	-		-,020		79,931
Interest payable		43,362	10,657		_	54,019	32,016		699		86,734
Construction contracts and accounts payable		3,799	20,700		(19,076)	5,423	5,692		39		11,154
Total current liabilities payable from restricted assets		149,401	155,073		(19,076)	285,398	71,583		2,363		359,344
Noncurrent liabilities:											
Net pension liability		246,724	4,163		_	250,887	157,742		_		408,629
Compensated absences due after one year		16,607	1,021		_	17,628	6,149		39		23,816
Environmental liabilities		18,662			_	18,662	-		-		18,662
Other liabilities		5,253	_		_	5,253	1,687		_		6,940
Total noncurrent liabilities		287,246	5,184		-	292,430	165,578		39		458,047
Long-term debt:											
Bonds and commercial paper payable, less current portion	2	2,369,215	450,215		_	2,819,430	1,612,640		38,125	4	,470,195
Unamortized premium (discount), net	_	76,158	20,565		_	96,723	57,974		(46)		154,651
Fair value of debt management strategy instruments		135,571			_	135,571	32,296		-		167.867
Total long-term debt		2,580,944	470,780		-	3,051,724	1,702,910		38,079	4	,792,713
Total liabilities		3,117,624	651,170		(19,815)	3,748,979	1,968,069		40,499		,757,547
Deferred inflows of resources											
Revenues to be used for future costs		318.815	165,466		_	484,281	24,394		_		508.675
Unrealized pension gains		16,446	2,835		-	19,281	10,515		_		29,796
Total deferred inflows of resources		335,261	168,301		-	503,562	34,909		-		538,471
Net position											
Net investment in capital assets		303,310	5,891		-	309,201	1,117,770		(3,308)	1.	,423,663
Restricted		219,987	23,906		19,076	262,969	201,441		3,276		467,686
Unrestricted		207,270	107,962		(19,076)	296,156	30,875		4,364		331,395
Total net position		730,567	137,759		-	868,326	1,350,086		4,332		,222,744
Total liabilities, deferred inflows of resources, and net position	\$ 4	1,183,452	\$ 957,230	\$	(19.815)	\$ 5,120,867	\$ 3,353,064	\$	44,831		,518,762

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

(III tilousarius - uriauditeu) marcii 2017	Electric									
	Sy	stem and			To	otal Electric	Sewer	District		
	Bu	ılk Power		SJRPP		Enterprise	Enterprise	Energy		
	Supply			System		Fund	Fund	System Fund		Total JEA
Unrestricted cash and investments				-				-		
Operations	\$	66,233	\$	15,454	\$	81,687	\$ 42,957	\$ 1,567	<b>'</b> \$	126,211
Rate stabilization:										
Fuel		166,398		-		166,398	-			166,398
Debt management		29,884		-		29,884	20,290	2,737	•	52,911
Environmental		32,995		-		32,995	2,057			35,052
Purchased Power		30,886		-		30,886	-			30,886
DSM/Conservation		3,236		-		3,236	-			3,236
Total rate stabilization funds	-	263,399		-		263,399	22,347	2,737	,	288,483
Customer deposits		41,709		-		41,709	14,526			56,235
General reserve		-		22,916		22,916	-			22,916
Self insurance reserve funds:										
Self funded health plan		10,073		-		10,073	-			10,073
Property insurance reserve		10,000		-		10,000	-			10,000
Total self insurance reserve funds		20,073		-		20,073	-			20,073
Environmental liability reserve	-	18,556		-		18,556	-			18,556
Total unrestricted cash and investments	\$	409,970	\$	38,370	\$	448,340	\$ 79,830	\$ 4,304	. \$	532,474
Restricted assets										
Renewal and replacement funds	\$	154,720	\$	80,372	\$	235,092	\$ 188,187	\$ 1,755	5 \$	425,034
Debt service reserve account		65,433		139,271		204,704	107,488	· ,	. '	312,192
Debt service funds		93,997		30,451		124,448	56,518	1,511		182,477
Environmental funds		· -		· -		· -	2,953	· .		2,953
Construction funds		263		_		263	152			415
Subtotal		314,413		250,094		564,507	355,298	3,266	;	923,071
Unrealized holding gain (loss) on investments		106		(3,855)		(3,749)	1,937	,		(1,812)
Other funds		-		5,834		5,834	-			5,834
Total restricted cash and investments	\$	314,519	\$	252,073	\$	566,592	\$ 357,235	\$ 3,266	\$	

JEA Schedule of Cash and Investments (in thousands - unaudited) March 2016

(III triousarius uridudited) maren 2010		Electric								
	Sv	stem and		Т	Total Electric	Sewer		District		
	•	lk Power	SJRPP		Enterprise	Enterprise		Energy		
		Supply	System		Fund	Fund	S۱	stem Fund	7	otal JEA
Unrestricted cash and investments		,	•							
Operations	\$	66,076	\$ 11,184	\$	77,260	\$ 24,733	\$	1,338	\$	103,331
Rate stabilization:										
Fuel		149,726	-		149,726	-		-		149,726
Debt management		42,126	-		42,126	20,290		2,737		65,153
Environmental		26,752	-		26,752	4,104		-		30,856
Purchased Power		37,486	-		37,486	-		-		37,486
DSM/Conservation		2,943	-		2,943	-		-		2,943
Total rate stabilization funds		259,033	-		259,033	24,394		2,737		286,164
Customer deposits		41,393	-		41,393	13,979		-		55,372
General reserve		-	24,725		24,725	-		-		24,725
Self insurance reserve funds:										
Self funded health plan		12,526	-		12,526	-		-		12,526
Property insurance reserve		10,000	-		10,000	-		-		10,000
Total self insurance reserve funds		22,526	-		22,526	-		-		22,526
Environmental liability reserve		18,662	-		18,662	-		-		18,662
Total unrestricted cash and investments	\$	407,690	\$ 35,909	\$	443,599	\$ 63,106	\$	4,075	\$	510,780
Restricted assets										
Renewal and replacement funds	\$	164,792	\$ 79,844	\$	244,636	\$ 170,813	\$	2,463	\$	417,912
Debt service reserve account		65,432	136,678		202,110	108,086		-		310,196
Debt service funds		93,240	32,660		125,900	48,130		1,512		175,542
Construction funds		-	-		-	681		-		681
Environmental funds		-	-		-	246		-		246
Subtotal		323,464	249,182		572,646	327,956		3,975		904,577
Unrealized holding gain (loss) on investments		4,092	(1,250)		2,842	5,053		-		7,895
Other funds		141	3,153		3,294	70		-		3,364
Total restricted cash and investments	\$	327,697	\$ 251,085	\$	578,782	\$ 333,079	\$	3,975	\$	915,836

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

DESCRIPTION	Electric System and Bulk Power Supply System	SJRPP System	Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	Total JEA
Unfunded pension costs	226,691	3,388	230,079	138,940	369,019
Water environmental projects	-	-	-	72,685	72,685
Scherer	11,180	-	11,180	-	11,180
Debt issue costs	2,605	3,452	6,057	236	6,293
Costs to be recovered from future revenues	240,476	6,840	247,316	211,861	459,177
SJRPP and Scherer	43,377	153,631	197,008	-	197,008
Fuel stabilization	166,398	-	166,398	-	166,398
Debt management stabilization	29,884	-	29,884	20,290	50,174
Environmental	32,995	-	32,995	2,057	35,052
Nonfuel purchased power	30,886	-	30,886	-	30,886
Self-insurance medical reserve	10,073	-	10,073	-	10,073
Customer benefit stabilization	3,236	-	3,236	-	3,236
Revenues to be used for future costs	316,849	153,631	470,480	\$ 22,347	492,827

JEA Regulatory Accounting Balances (in thousands - unaudited) March 2016

	Electric System and Bulk Power		Total Electric	Water and Sewer	
DESCRIPTION	Supply System	SJRPP System	<b>Enterprise Fund</b>	Enterprise Fund	Total JEA
Unfunded pension costs	214,133	2,883	217,016	136,905	353,921
Water environmental projects	-	-	-	81,237	81,237
Scherer	12,296	-	12,296	-	12,296
Debt issue costs	2,273	3,971	6,244	246	6,490
Costs to be recovered from future revenues	228,702	6,854	235,556	218,388	453,944
SJRPP and Scherer	47,255	165,466	212,721	-	212,721
Fuel stabilization	149,726	-	149,726	-	149,726
Debt management stabilization	42,126	-	42,126	20,290	62,416
Environmental	26,752	-	26,752	4,104	30,856
Nonfuel purchased power	37,486	-	37,486	-	37,486
Self-insurance medical reserve	12,527	-	12,527	-	12,527
Customer benefit stabilization	2,943	-	2,943	-	2,943
Revenues to be used for future costs	318,815	165,466	484,281	\$ 24,394	508,675

(III tilousarius - uriauditeu)		I	Month	1	Year-To-Date					
			March				arch			
		2017		2016		2017		2016		
Operating revenues	_				_		_			
Electric - base	\$	61,85	-	58,225	\$	369,666	-	359,696		
Electric - fuel and purchased power		40,85		36,830		243,880		225,569		
Water and sewer		37,97		38,408		208,994		193,607		
District energy system		59		568		4,054		3,993		
Other		2,76		2,291		16,474		15,980		
Total operating revenues		144,04	.3	136,322		843,068		798,845		
Operating expenses										
Operations and maintenance:										
Fuel		30,72	.8	29,284		193,550		180,391		
Purchased power		7,43	7	4,823		34,409		26,630		
Maintenance and other operating expenses		33,23	2	36,668		182,944		184,071		
Depreciation		31,54	2	35,532		189,161		189,343		
State utility and franchise taxes		5,05	6	5,359		32,123		32,377		
Recognition of deferred costs and revenues, net		1,48	7	863		(1,228	)	(5,156)		
Total operating expenses		109,48	2	112,529		630,959		607,656		
Operating income		34,56	51	23,793		212,109		191,189		
Nonoperating revenues (expenses)										
Interest on debt		(14,17	3)	(14,230)		(84,324	)	(81,939)		
Investment income		1,93	8	463		8,695		5,689		
Debt management strategy		(1,39	3)	(1,602)		(8,518	)	(9,844)		
Net increase (decrease) in fair value of investments		(22	27)	4,121		(8,340	)	1,996		
Allowance for funds used during construction		1,08	5	647		5,980		3,971		
Other revenue		67	9	923		3,893		5,735		
Earnings from The Energy Authority		88	7	206		3,164		1,464		
Other expense		(59	9)	(29)		(1,434	)	(193)		
Other interest, net		(2	(8)	(21)		(269	)	(275)		
Total nonoperating expenses, net		(11,83	31)	(9,522)		(81,153	)	(73,396)		
Income before contributions		22,73	0	14,271		130,956		117,793		
Contributions (to) from										
General Fund, City of Jacksonville, Florida		(9,65	(2)	(24,515)		(57,911	)	(72,094)		
Developers and other		2,78		6,285		31,436	•	31,427		
Reduction of plant cost through contributions		(68		(4,563)		(21,136		(21,291)		
Total contributions		(7,54		(22,793)		(47,611		(61,958)		
Change in net position		15,18	· 4	/O E22\		02 245		5E 02F		
Net position, beginning of period		2,445,08		(8,522) 2,231,266		83,345 2,376,925		55,835 2,166,909		
Net position, beginning of period  Net position, end of period	\$	2,445,00			\$	2,460,270		2,100,909		
Not position, end of period	Ψ	۷,۳۵۵,۷۱	υ φ	۷,۷۷۷,۱۶4	Ψ	۷,700,270	Ψ	۷,۷۷۷,۱۳۴		

JEA
Combining Statement of Revenues, Expenses and Changes in Net Position
(in thousands - unaudited) for the month ended March 2017

	Electric System and Bulk Power Supply System	SJRPP System	Elimination of Intercompany transactions	Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	District Energy System Fund	Eliminations	Total JEA
Operating revenues								
Electric - base	\$ 62,121	\$ -	\$ -	\$ 62,121	\$ -	\$ -	\$ (263)	\$ 61,858
Electric - fuel and purchased power	32,142	18,420	(8,716)	41,846	-	-	(991)	40,855
Water and sewer	-	-	-	-	37,996	-	(17)	37,979
District energy system	-	-	-	-	-	590	-	590
Other	2,184	-	-	2,184	766	-	(189)	2,761
Total operating revenues	96,447	18,420	(8,716)	106,151	38,762	590	(1,460)	144,043
Operating expenses								
Operations and maintenance:								
Fuel	22,143	8,585	-	30,728	-	-	-	30,728
Purchased power	16,153	-	(8,716)	7,437	-	-	-	7,437
Maintenance and other operating expenses	17,994	5,277	-	23,271	11,130	291	(1,460)	33,232
Depreciation	15,967	3,563	-	19,530	11,813	199	-	31,542
State utility and franchise taxes	4,188	-	-	4,188	868	-	-	5,056
Recognition of deferred costs and revenues, net	(279)	(1,002)	-	(1,281)	2,768	-	-	1,487
Total operating expenses	76,166	16,423	(8,716)	83,873	26,579	490	(1,460)	109,482
Operating income	20,281	1,997	-	22,278	12,183	100	-	34,561
Nonoperating revenues (expenses)								
Interest on debt	(6,861)	(2,006)	-	(8,867)	(5,190)	(116)	-	(14,173)
Investment income	902	449	-	1,351	582	5	-	1,938
Debt management strategy	(1,103)	-	-	(1,103)	(290)	-	-	(1,393)
Net increase (decrease) in fair value of investments	297	420	-	717	(944)	-	-	(227)
Allowance for funds used during construction	612	-	-	612	473	-	-	1,085
Other revenue	437	33	-	470	209	-	-	679
Earnings from The Energy Authority	887	-	-	887	-	-	-	887
Other expense	(27)	-	-	(27)	(572)	-	-	(599)
Other interest, net	(28)	-	-	(28)	-	-	-	(28)
Total nonoperating expenses, net	(4,884)	(1,104)	-	(5,988)	(5,732)	(111)	-	(11,831)
Income before contributions	15,397	893	-	16,290	6,451	(11)	-	22,730
Contributions (to) from								
General Fund, City of Jacksonville, Florida	(7,689)	-	-	(7,689)	(1,963)	-	-	(9,652)
Developers and other	64	-	-	64	2,722	-	-	2,786
Reduction of plant cost through contributions	(64)	-	-	(64)	(616)	-	-	(680)
Total contributions	(7,689)	-	-	(7,689)	143	-	-	(7,546)
Change in net position	7,708	893	-	8,601	6,594	(11)	-	15,184
Net position, beginning of period	873,049	138,399	-	1,011,448	1,428,894	4,744	-	2,445,086
Net position, end of period	\$ 880,757	\$ 139,292	\$ -	\$ 1,020,049	\$ 1,435,488	\$ 4,733	\$ -	\$2,460,270

JEA Combining Statement of Revenues, Expenses and Changes in Net Position (in thousands - unaudited) for the month ended March 2016

	Electric System and Bulk Power Supply System	SJRPP System	Elimination of Intercompany transactions	Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	District Energy System Fund	Eliminations	Total JEA
Operating revenues								
Electric - base	\$ 58,482	\$ -	\$ -	\$ 58,482	\$ -	\$ -	\$ (257)	\$ 58,225
Electric - fuel and purchased power	28,495	18,074	(8,771)	37,798	-	-	(968)	36,830
Water and sewer	-	-	-	-	38,455	-	(47)	38,408
District energy system	-	-	-	-	-	568	-	568
Other	1,762	-	-	1,762	709	-	(180)	2,291
Total operating revenues	88,739	18,074	(8,771)	98,042	39,164	568	(1,452)	136,322
Operating expenses								
Operations and maintenance:								
Fuel	19,183	10,101	-	29,284	-	-	-	29,284
Purchased power	13,594	-	(8,771)	4,823	-	-	-	4,823
Maintenance and other operating expenses	22,488	2,961	-	25,449	12,388	283	(1,452)	36,668
Depreciation	16,316	3,563	-	19,879	15,462	191	-	35,532
State utility and franchise taxes	4,528	-	-	4,528	831	-	-	5,359
Recognition of deferred costs and revenues, net	(218)	(1,081)	-	(1,299)	2,162	-	-	863
Total operating expenses	75,891	15,544	(8,771)	82,664	30,843	474	(1,452)	112,529
Operating income	12,848	2,530	-	15,378	8,321	94	-	23,793
Nonoperating revenues (expenses)								
Interest on debt	(6,825)	(2,212)	-	(9,037)	(5,075)	(118)	-	(14,230)
Investment income	(199)	268	-	69	392	2	-	463
Debt management strategy	(1,242)	-	-	(1,242)	(360)	-	-	(1,602)
Net increase in fair value of investments	1,926	951	-	2,877	1,244	-	-	4,121
Allowance for funds used during construction	300	-	-	300	347	-	-	647
Other revenue	386	34	-	420	503	-	-	923
Earnings from The Energy Authority	206	-	-	206	-	-	-	206
Other expense	(27)	-	-	(27)	(2)	-	-	(29)
Other interest, net	(20)	-	-	(20)	(1)	-	-	(21)
Total nonoperating expenses, net	(5,495)	(959)	-	(6,454)	(2,952)	(116)	-	(9,522)
Income before contributions	7,353	1,571	-	8,924	5,369	(22)	-	14,271
Contributions (to) from								
General Fund, City of Jacksonville, Florida	(19,643)	-	-	(19,643)	(4,872)	-	-	(24,515)
Developers and other	-	-	-	-	6,285	-	-	6,285
Reduction of plant cost through contributions	-	-	-	-	(4,563)	-	-	(4,563)
Total contributions	(19,643)	-	-	(19,643)	(3,150)	-	-	(22,793)
Change in net position	(12,290)	1,571	-	(10,719)	2,219	(22)	-	(8,522)
Net position, beginning of period	742,857	136,188	-	879,045	1,347,867	4,354		2,231,266
Net position, end of period	\$ 730,567	\$ 137,759	\$ -	\$ 868,326	\$ 1,350,086	\$ 4,332	\$ -	\$2,222,744

JEA
Combining Statement of Revenues, Expenses and Changes in Net Position
(in thousands - unaudited) for the six months ended March 2017

	Sys <sup>a</sup> Bull	lectric tem and k Power ly System	SJRPP System	Elimina Intercor transac	npany	Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	District Energy System Fund	Eliminations	Total JEA
Operating revenues										
Electric - base	\$	371,326	\$ -	\$	-	\$ 371,326	\$ -	\$ -	\$ (1,660)	\$ 369,666
Electric - fuel and purchased power		193,592	114,426	(5	7,892)	250,126	-	_	(6,246)	243,880
Water and sewer		-	-		-	-	209,152	-	(158)	208,994
District energy system		-	-		-	-	-	4,054	-	4,054
Other		12,954	-		-	12,954	4,659	-	(1,139)	16,474
Total operating revenues		577,872	114,426	(5	7,892)	634,406	213,811	4,054	(9,203)	843,068
Operating expenses										
Operations and maintenance:										
Fuel		129,412	64,138		-	193,550	-	-	-	193,550
Purchased power		92,301	-	(5	7,892)	34,409	-	-	-	34,409
Maintenance and other operating expenses		101,578	22,229		-	123,807	66,304	2,036	(9,203)	182,944
Depreciation		95,179	21,377		-	116,556	71,431	1,174	-	189,161
State utility and franchise taxes		27,055	-		-	27,055	5,068	-	-	32,123
Recognition of deferred costs and revenues, net		(1,672)	(6,018)	)	-	(7,690	) 6,462	-	-	(1,228)
Total operating expenses		443,853	101,726	(5	7,892)	487,687	149,265	3,210	(9,203)	630,959
Operating income		134,019	12,700		-	146,719	64,546	844	-	212,109
Nonoperating revenues (expenses)										
Interest on debt		(41,847)	(12,041)	)	-	(53,888	) (29,738	) (698)	-	(84,324)
Investment income		3,326	1,981		-	5,307	3,374	14	-	8,695
Debt management strategy		(6,758)	-		-	(6,758)	) (1,760	) -	-	(8,518)
Net decrease in fair value of investments		(2,838)	(2,345)	)	-	(5,183	) (3,157	) -	-	(8,340)
Allowance for funds used during construction		3,426	-		-	3,426	2,549	5	-	5,980
Other revenue		2,448	195		-	2,643	1,250	-	-	3,893
Earnings from The Energy Authority		3,164	-		-	3,164	-	-	-	3,164
Other expense		(317)	-		-	(317	) (1,117	) -	-	(1,434)
Other interest, net		(239)	-		-	(239	) (30	) -	-	(269)
Total nonoperating expenses, net		(39,635)	(12,210)	)	-	(51,845	) (28,629	) (679)	-	(81,153)
Income before contributions		94,384	490		-	94,874	35,917	165	-	130,956
Contributions (to) from										
General Fund, City of Jacksonville, Florida		(46,135)	-		-	(46,135	) (11,776	) -	-	(57,911)
Developers and other		716	-		-	716	30,720	-	-	31,436
Reduction of plant cost through contributions		(716)	-		-	(716	) (20,420	) -	-	(21,136)
Total contributions		(46,135)	-		-	(46,135	) (1,476	) -	-	(47,611)
Change in net position		48,249	490		-	48,739	34,441	165	-	83,345
Net position, beginning of year	_	832,508	138,802			971,310	1,401,047	4,568		2,376,925
Net position, end of period	\$	880,757	\$ 139,292	\$	-	\$ 1,020,049	\$ 1,435,488	\$ 4,733	\$ -	\$ 2,460,270

JEA
Combining Statement of Revenues, Expenses and Changes in Net Position
(in thousands - unaudited) for the six months ended March 2016

	Sy: Bu	Electric stem and ilk Power ply System	SJRPP System	Elimination of Intercompany transactions	Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	District Energy System Fund	Eliminations	Total JEA
Operating revenues									
Electric - base	\$	361,202	\$ -	\$ -	\$ 361,202	\$ -	\$ -	\$ (1,506)	\$ 359,696
Electric - fuel and purchased power		175,595	106,530	(50,888)	231,237	-	-	(5,668)	225,569
Water and sewer		-	-	-	-	193,880	-	(273)	193,607
District energy		-	-	-	-	-	3,993	-	3,993
Other		12,283	-	-	12,283	4,778	-	(1,081)	15,980
Total operating revenues		549,080	106,530	(50,888)	604,722	198,658	3,993	(8,528)	798,845
Operating expenses									
Operations and maintenance:									
Fuel		123,055	57,336	-	180,391	-	-	-	180,391
Purchased power		77,518	-	(50,888)	26,630	-	-	-	26,630
Maintenance and other operating expenses		104,778	18,888	-	123,666	66,788	2,145	(8,528)	184,071
Depreciation		96,120	21,377	-	117,497	70,700	1,146	-	189,343
State utility and franchise taxes		27,455	-	-	27,455	4,922	-	-	32,377
Recognition of deferred costs and revenues, net		(1,308)	(5,929)	-	(7,237)	2,081	-	-	(5,156)
Total operating expenses		427,618	91,672	(50,888)	468,402	144,491	3,291	(8,528)	607,656
Operating income		121,462	14,858	-	136,320	54,167	702	-	191,189
Nonoperating revenues (expenses)									
Interest on debt		(38,917)	(13,269)	-	(52,186)	(29,047)	(706)	-	(81,939)
Investment income		2,100	1,926	-	4,026	1,652	11	-	5,689
Debt management strategy		(7,640)	-	-	(7,640)	(2,204)	-	-	(9,844)
Net increase in fair value of investments		858	44	-	902	1,094	-	-	1,996
Allowance for funds used during construction		1,967	-	-	1,967	1,996	8	-	3,971
Other revenue		2,284	205	-	2,489	3,246	-	-	5,735
Earnings from The Energy Authority		1,464	-	-	1,464	-	-	-	1,464
Other expense		(157)	-	-	(157)	(36)	-	-	(193)
Other interest, net		(229)	-	-	(229)	(46)	-	-	(275)
Total nonoperating expenses, net		(38,270)	(11,094)	-	(49,364)	(23,345)	(687)	-	(73,396)
Income before contributions		83,192	3,764	-	86,956	30,822	15	-	117,793
Contributions (to) from									
General Fund, City of Jacksonville, Florida		(57,860)	-	-	(57,860)	(14,234)	-	-	(72,094)
Developers and other		-	-	-	-	31,427	-	-	31,427
Reduction of plant cost through contributions		-	-	-	-	(21,291)	-	-	(21,291)
Total contributions		(57,860)	-	-	(57,860)	(4,098)	-	-	(61,958)
Change in net position		25,332	3,764	-	29,096	26,724	15	-	55,835
Net position, beginning of year		705,235	133,995		839,230	1,323,362	4,317		2,166,909
Net position, end of period	\$	730,567	\$ 137,759	\$ -	\$ 868,326	\$ 1,350,086	\$ 4,332	\$ -	\$2,222,744

Statement of Cash Flows (in thousands - unaudited)

(in thousands - unaudited)					_
		Y	ear-To		ate
Operating activities		2047	Mar	ch	2046
Operating activities Receipts from customers	\$	<b>2017</b> 860,	966	\$	2016 844,470
Payments to suppliers	Ψ	(364,		Ψ	(349,669)
Payments to suppliers  Payments to employees		(125,			(119,723)
Other receipts		•	788		20,299
Net cash provided by operating activities		387,			395,377
		<u>,                                      </u>			· · · · · · · · · · · · · · · · · · ·
Noncapital and related financing activities					
Contribution to General Fund, City of Jacksonville, Florida		(57,	789)		(71,898)
Build America Bonds subsidies			587		3,626
Other nonoperating activities			129)		(33)
Net cash used in noncapital financing activities		(55,	331)		(68,305)
Conital and related financing activities					
Capital and related financing activities		(404	EOE\		(407 500)
Repayment of debt principal Defeasance of debt		(181, (153,			(187,500)
Acquisition and construction of capital assets		(155,	,		(124,788)
Interest paid on debt		(100,			(99,840)
Proceeds from issuance of debt, net		•	405		3,000
Developer and other contributions			300		10,136
Proceeds from disposal of assets			169		880
Other financing activities			030)		(17)
Net cash used in capital and related financing activities		(500,			(398,129)
nor sach about in capital and rotated intaining activities		(000)	· <u>-</u> ·,		(000,:20)
Investing activities					
Purchase of investments		(1,046,	567)		(1,099,817)
Proceeds from sale and maturities of investments		965,	497		872,890
Investment income		8,	529		5,712
Distributions from The Energy Authority		3,	143		2,524
Net cash used in investing activities		(69,	398)		(218,691)
		(00 <del>7</del>	<b></b> \		(000 740)
Net change in cash and cash equivalents		(237,	,		(289,748)
Cash and cash equivalents, beginning of year	ф.	596,		Φ	636,074
Cash and cash equivalents, end of period	\$	359,	148	\$	346,326
Reconciliation of operating income to net cash provided by operating	activ	ities			
Operating income	\$		109	\$	191,189
Adjustments:	Ψ	Z 1, Z,	100	Ψ	101,100
Depreciation and amortization		189,	840		191,826
Recognition of deferred costs and revenues, net			228)		(5,156)
Gain on sale of noncore assets		,	_		1,959
Changes in noncash assets and noncash liabilities:					
Accounts receivable		51,	137		50,695
Accounts receivable, restricted		(	685)		2,360
Inventories		(27,	335)		(21,286)
Other assets		(3,	832)		(1,976)
Accounts and expenses payable		•	188)		(25,928)
Liabilities payable, restricted			910		(2,207)
Other noncurrent liabilities and deferred inflows			650)		13,901
Net cash provided by operating activities	\$	387,	078	\$	395,377
Noncash activity	<b>.</b>		100	Φ.	04.004
Contribution of capital assets from developers	\$			\$	21,291
Unrealized losses on fair value of investments, net	\$	(8,	340)	Ф	1,996

JEA
Combining Statement of Cash Flows
(in thousands - unaudited) for the six months ended March 2017

Payments to suppliers	District Energy System Fund	Eliminations	Total JEA
Payments to suppliers   (293.12)   (15.412)   (15.412)   (25.45)   (22.54)   (25.45)	\$ 3,887	\$ (8,064)	\$ 860,866
Payments to employees   (80.087) (15.412)   (95.498)   (29.289)   Colher receipts   12.420   1.2420   4.507   Colher receipts   12.420   1.2420   4.507   Colher receipts   12.420   1.2420	3,007 ( (1,896)	9,203	(364,509)
Other receipts         12,420         -         12,420         4,507           Net cash provided by operating activities         230,059         2,045         -         232,044         185,662           Noncapital and related financing activities         Contribution to General Fund. City of Jacksonville, Florida         (46,089)         -         (46,089)         (11,700)           Build America Bonds subsidies         2,142         195         2,337         1,250           Other nonoperating activities         (12)         195         4(48,764)         (11,177)           Net cash used in noncapital financing activities         4(3,585)         195         -         (146,025)         (33,875)         (1,1567)           Capital and related financing activities         (102,240)         (43,785)         -         (146,025)         (33,875)         (2,061)         (2,061)         (3,061)         (3,063)         (3,075)         (4,063)         (3,075)         (4,063)         (4,062)         (33,075)         (2,061)         (3,061)         (3,075)         (3,087)         (3,063)         (3,063)         (4,062)         (4,062)         (4,062)         (4,062)         (4,062)         (4,062)         (4,062)         (4,062)         (4,062)         (4,062)         (4,062)         (4,062)         (	(279)	9,203	(125,067
Net cash priovided by operating activities   230,059   2,045   - 232,104   153,262	(279)	(1,139)	15,788
Contribution to General Fund, City of Jacksonville, Florida   46,089   -   48,089   11,700   23,37   1,250   23,37	1,712	(1,139)	387,078
Sail America Bonds subsidies   2,142   195   2,337   1,250			
Define nonoperating activities   1(12)   -   (12)   (1,117)   (1,157)   (1	-	-	(57,789
Net cash used in noncapital financing activities	-	-	3,587
Capital and related financing activities   Capital and related financing activities   Capital and related financing activities   Capital and construction of capital assets   Capital Capita	=	-	(1,129
Repayment of debt principal	-	-	(55,331
Defeasance of debt			
Requisition and construction of capital assets   72,988   -   -   772,988   86,312   1	(1,625)	-	(181,525
Interest paid on debt   (54,512) (10,656)   - (65,168) (34,693)   Proceeds from issuance of debt, net   90,405   -   90,405   -   10,300   Proceeds from issuance of debt, net   90,405   -   -   0,300   Proceeds from issuance of debt, net   90,405   -   -   0,300   Proceeds from disposal of assets   151   -     -   151   18   18   Proceeds from disposal of assets   151   -     -     (6,030)   -	(070)	-	(153,210
Proceeds from issuance of debt, net   90,405   -   90,405   -   10,300     10,000   10,000     10,000     10,000     10,000     10,000     10,000   10,000     10,000     10,000     10,000     10,000     10,000   10,000     10,000     10,000     10,000     10,000     10,000   10,000     10,000     10,000     10,000     10,000     10,000   10,000     10,000     10,000     10,000     10,000     10,000   10,000     10,000     10,000     10,000     10,000     10,000   10,000     10,000     10,000     10,000     10,000     10,000   10,000     10,000     10,000     10,000     10,000     10,000   10,000     10,000     10,000     10,000     10,000     10,000   10,000     10,000     10,000     10,000     10,000     10,000   10,000     10,000     10,000     10,000     10,000     10,000   10,000     10,000     10,000     10,000     10,000     10,000   10,000     10,000     10,000     10,000     10,000     10,000   10,000     10,000     10,000     10,000     10,000     10,000   10,000     10,000     10,000     10,000     10,000     10,000   10,000     10,000     10,000     10,000     10,000     10,000   1	(373)	-	(159,673
Proceeds from disposal of assets   15	(699)	-	(100,560
Proceeds from disposal of assets   151	-	-	90,405 10,300
Company   Comp	-	-	169
Net cash used in capital and related financing activities   (298,424) (54,441)   (54,441)   (352,865) (144,562)   (144,562)	-	-	(6,030
Purchase of investments (377,087) (338,182) - (715,269) (331,298) Proceeds from sale and maturities of investments (365,310) 330,563 - 695,873 (269,624) 100 (201,000) 100	(2,697)	-	(500,124
Purchase of investments    Carchage of investments   Carchage of investments   Carchage of investments   Carchage of investments   Carchage of investment   Carchage of inv			
Nestment income   3,218   1,927   - 5,145   3,370     Net cash provided by (used in) investing activities   (5,416)   (5,692)   - (111,108)   (58,304)     Net change in cash and cash equivalents   (117,740)   (57,893)   - (175,633)   (61,171)     Cash and cash equivalents, beginning of year   295,223   130,021   - 425,244   163,138     Cash and cash equivalents, end of period   177,483   72,128   - 249,611   101,967       Reconciliation of operating income to net cash provided by operating activities     Cash and amortization of operating income to net cash provided by operating activities     Cash and amortization of operating income to net cash provided by operating activities     Cash and cash equivalents, end of period   134,019   12,700   - 146,719   64,546   8     Cash and cash equivalents, end of period   21,377   - 116,557   72,109     Cash and amortization   25,853   (5,041)   - (7,690)   6,462     Changes in noncash assets and revenues, net   (1,672   6,018   - (7,690)   6,462     Changes in noncash assets and noncash liabilities:     Accounts receivable   25,853   (5,041)   - 47,812   3,492     Accounts receivable, restricted   25,853   (22,814)   - (25,599)   (1,736)     Other assets   (3,563)   - (3,563)   (262)     Accounts and expenses payable   (17,785)   (695)   - (18,480)   (2,594)     Liabilities payable, restricted   - 1,910   - (25,099)   11,397     Other noncurrent liabilities and deferred inflows   (25,655)   626   - (25,009)   11,397	-	-	(1,046,567
Statish provided by (used in) investing activities   3,143   -   -   3,143   -   -   3,143   -   -   3,143   -   -   3,143   -   -   3,143   -   -   3,143   -   -   -   -   3,143   -   -   -   -   -   -   -   -   -	-	-	965,497
Let cash provided by (used in) investing activities   (5,416)   (5,692)   - (11,108)   (58,304)     Let change in cash and cash equivalents   (117,740)   (57,893)   - (175,633)   (61,171)     Let change in cash and cash equivalents, beginning of year   295,223   130,021   - 425,244   163,138     Let change in cash and cash equivalents, beginning of year   295,223   130,021   - 425,244   163,138     Let conciliation of operating income to net cash provided by operating activities	14	-	8,529
Cash and cash equivalents   (117,740)   (57,893)   - (175,633)   (61,171)   (25,893)   - (175,633)   (61,171)   (25,893)   - (175,633)   (61,171)   (25,893)   - (175,633)   (61,171)   (25,893)   - (175,633)   (61,171)   (25,893)   - (175,633)   (61,171)   (25,893)   - (175,633)   (61,171)   (25,893)   - (175,633)   (61,171)   (25,993)   - (175,633)   (61,171)   (25,893)   - (175,633)   (262)   (25,695)   (25,655)   (25,655)   (25,655)   (25,602)   - (15,633)   (157,171)   - (175,633)   (161,171)   (175,633)   (161,171)   (175,633)   (175,	-	-	3,143
Cash and cash equivalents, beginning of year         295,223         130,021         - 425,244         163,138           Cash and cash equivalents, end of period         \$ 177,483         72,128         \$ 249,611         \$ 101,967         \$           Reconciliation of operating income to net cash provided by operating activities         Coperating income         \$ 134,019         \$ 12,700         \$ \$ \$ 146,719         \$ 64,546         \$           Depreciation and amortization         95,180         21,377         \$ 116,557         72,109           Recognition of deferred costs and revenues, net         (1,672)         (6,018)         \$ (7,690)         6,462           Changes in noncash assets and noncash liabilities:         Accounts receivable, restricted         \$ 2,853         (5,041)         \$ 47,812         3,492           Accounts receivable, restricted         (533)         \$ 2         (533)         (152)           Inventories         (2,785)         (22,814)         \$ (25,599)         (1,736)           Other assets         (3,563)         \$ 2         (18,480)         (2,594)           Liabilities payable, restricted         \$ 1,910         \$ 1,910         \$ 1,910         \$ 1,910         \$ 1,910         \$ 1,910         \$ 1,910         \$ 1,910         \$ 1,910         \$ 1,910 </td <td>14</td> <td>-</td> <td>(69,398</td>	14	-	(69,398
Cash and cash equivalents, end of period   \$ 177,483 \$ 72,128 \$ - \$ 249,611 \$ 101,967 \$	(971)	-	(237,775
Reconciliation of operating income to net cash provided by operating activities  Operating income \$ 134,019 \$ 12,700 \$ - \$ 146,719 \$ 64,546 \$ Adjustments:  Depreciation and amortization 95,180 21,377 - 116,557 72,109  Recognition of deferred costs and revenues, net (1,672) (6,018) - (7,690) 6,462  Changes in noncash assets and noncash liabilities:  Accounts receivable 52,853 (5,041) - 47,812 3,492  Accounts receivable, restricted (533) - (533) (152)  Inventories (2,785) (22,814) - (25,599) (1,736)  Other assets (3,563) - (3,563) (262)  Accounts and expenses payable (17,785) (695) - (18,480) (2,594)  Liabilities payable, restricted - 1,910 - 1,910 -  Other noncurrent liabilities and deferred inflows (25,655) 626 - (25,029) 11,397	8,541	-	596,923
Second comparison of the preciation and amortization an	\$ 7,570	\$ -	\$ 359,148
Adjustments:         Depreciation and amortization         95,180         21,377         -         116,557         72,109           Recognition of deferred costs and revenues, net         (1,672)         (6,018)         -         (7,690)         6,462           Changes in noncash assets and noncash liabilities:         S2,853         (5,041)         -         47,812         3,492           Accounts receivable, restricted         (533)         -         -         (533)         (152)           Inventories         (2,785)         (22,814)         -         (25,599)         (1,736)           Other assets         (3,563)         -         -         (3,563)         (262)           Accounts and expenses payable         (17,785)         (695)         -         (18,480)         (2,594)           Liabilities payable, restricted         -         1,910         -         1,910         -         -           Other noncurrent liabilities and deferred inflows         (25,655)         626         -         (25,029)         11,397		•	<b>.</b> 040.400
Recognition of deferred costs and revenues, net         (1,672)         (6,018)         - (7,690)         6,462           Changes in noncash assets and noncash liabilities:         52,853         (5,041)         - 47,812         3,492           Accounts receivable, restricted         (533)         - (533)         (152)           Inventories         (2,785)         (22,814)         - (25,599)         (1,736)           Other assets         (3,563)         - (3,563)         (262)           Accounts and expenses payable         (17,785)         (695)         - (18,480)         (2,594)           Liabilities payable, restricted         - 1,910         - 1,910         - 1,910         - 1,910           Other noncurrent liabilities and deferred inflows         (25,655)         626         - (25,029)         11,397	\$ 844	\$ -	\$ 212,109
Changes in noncash assets and noncash liabilities:       52,853       (5,041)       - 47,812       3,492         Accounts receivable, restricted       (533)       - (533)       (5,041)       - (533)       (152)         Inventories       (2,785)       (22,814)       - (25,599)       (1,736)         Other assets       (3,563)       (3,563)       (262)         Accounts and expenses payable       (17,785)       (695)       - (18,480)       (2,594)         Liabilities payable, restricted       - 1,910       - 1,910          Other noncurrent liabilities and deferred inflows       (25,655)       626       - (25,029)       11,397	1,174	-	189,840
Accounts receivable, restricted     (533)     -     -     (533)     (152)       Inventories     (2,785)     (22,814)     -     (25,599)     (1,736)       Other assets     (3,563)     -     -     (3,563)     (262)       Accounts and expenses payable     (17,785)     (695)     -     (18,480)     (2,594)       Liabilities payable, restricted     -     1,910     -     1,910     -       Other noncurrent liabilities and deferred inflows     (25,655)     626     -     (25,029)     11,397	-	-	(1,228
Inventories	(167)	-	51,137
Other assets       (3,563)       -       -       (3,563)       (262)         Accounts and expenses payable       (17,785)       (695)       -       (18,480)       (2,594)         Liabilities payable, restricted       -       1,910       -       1,910       -         Other noncurrent liabilities and deferred inflows       (25,655)       626       -       (25,029)       11,397	-	-	(685
Accounts and expenses payable       (17,785)       (695)       - (18,480)       (2,594)         Liabilities payable, restricted       - 1,910       - 1,910       1,910       1,910       - (25,029)       11,397         Other noncurrent liabilities and deferred inflows       (25,655)       626       - (25,029)       11,397	-	-	(27,335
Liabilities payable, restricted       -       1,910       -       1,910       -         Other noncurrent liabilities and deferred inflows       (25,655)       626       -       (25,029)       11,397	(7)	-	(3,832
Other noncurrent liabilities and deferred inflows         (25,655)         626         - (25,029)         11,397	(114)	-	(21,188
	- (40)	-	1,910
vet cash provided by operating activities  \$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	(18)	<u>-</u>	(13,650
	\$ 1,712	\$ -	\$ 387,078
Noncash activity Contribution of capital assets from developers \$ 716 \$ - \$ - 716 \$ 20,420 \$	\$ - S	\$ -	\$ 21,136
Contribution of capital assets from developers \$ 716 \$ - \$ - 716 \$ 20,420 \$ Jurealized losses on fair value of investments, net \$ (2,838) \$ (2,345) \$ - \$ (5,183) \$ (3,157) \$			\$ (8,340

JEA Combining Statement of Cash Flows (in thousands - unaudited) for the six months ended March 2016

	Sy: Bu	Electric stem and lk Power bly System	SJRPP System	li	Elimination of ntercompany transactions	Total Elec Enterpris Fund		Water and Sewer Enterprise Fund	District Energy System Fund	Elimination	s	Total JEA
Operating activities Receipts from customers	\$	590,894	\$ 102,927	7 ¢	(52,759)	\$ 641,0	62	\$ 206,243	\$ 4,612	\$ (7,447	7) ¢	844,470
Payments to suppliers	Ψ	(276,514)	(90,372		52,759	(314,1		(42,133)	(1,937		, .	(349,669)
Payments to employees		(78,034)	(12,622		32,739	(90,6	,	(28,828)			,	(119,723
Other receipts		13,946	(12,022	-)	-	13,9		7,434	(239	(1,081	-	20,299
Net cash provided by operating activities		250,292	(67	7)	-	250,2		142,716	2,436		-	395,377
Noncapital and related financing activities												
Contribution to General Fund, City of Jacksonville, Florida		(57,726)	_	_	_	(57,7	26)	(14,172)	_		_	(71,898
Build America Bonds subsidies		2,170	205	-	_	2,3		1,251	_		_	3,626
Other nonoperating activities		(33)	200	_	_		33)	1,201	_		_	(33
Net cash used in noncapital financing activities		(55,589)	205	5	-	(55,3		(12,921)	-		-	(68,305
Capital and related financing activities												
Repayment of debt principal		(98,765)	(50,945	5)	_	(149,7	10)	(36,180)	(1,610	) .	-	(187.500
Acquisition and construction of capital assets		(60,660)	(22,010	-	_	(60,6		(63,772)	(356			(124,788
Interest paid on debt		(53,115)	(11,438	3)	_	(64,5		(34,582)			_	(99,840
Proceeds from issuance of debt, net		(00,1.0)	(,.00	-	_	(0.,0	-	3,000	(. 00	<i>'</i>	_	3,000
Developer and other contributions		_		_	_		_	10,136	_		_	10,136
Proceeds from disposal of assets		780		_	_	7	80	100	_		_	880
Other financing activities		(17)		_			17)	100	_		_	(17
Net cash used in capital and related financing activities		(211,777)	(62,383	3)	-	(274,1		(121,298)	(2,671	) .	-	(398,129
Investing activities Purchase of investments Proceeds from sale and maturities of investments Investment income Distributions from The Energy Authority Net cash provided by (used in) investing activities		(552,134) 427,936 2,069 2,524 (119,605)	(248,854 239,200 1,970 (7,684	) ) -	- - - - -	(800,9 667,1 4,0 2,5 (127,2	36 39 24	(298,829) 205,754 1,662 - (91,413)	- - 11 - 11		-	(1,099,817 872,890 5,712 2,524 (218,691
Net change in cash and cash equivalents		(136,679)	(69,929	۵۱	_	(206,6	U8)	(82,916)	(224	) .	_	(289,748
Cash and cash equivalents, beginning of year		316,079	139,918			455,9		171,803	8,274	,		636,074
Cash and cash equivalents, beginning of year	\$		\$ 69,989						\$ 8,050		- \$	
Reconciliation of operating income to net cash provided by (used in	n) operatir	na activities	;									
Operating income Adjustments:	\$	121,462		3 \$	-	\$ 136,3	20	\$ 54,167	\$ 702	\$	- \$	191,189
Depreciation and amortization		96,120	21,377	7	_	117,4	97	73,183	1,146		-	191,826
Recognition of deferred costs and revenues, net		(1,308)	(5,929		_	(7,2		2,081			_	(5,156
Gain on sale of noncore assets		-	(-,-	-	-			1,959	-		-	1,959
Changes in noncash assets and noncash liabilities:								.,				.,
Accounts receivable		52,249	(3,603	3)	_	48.6	46	1,430	619		_	50,695
Accounts receivable, restricted		1,663	(0,000	-	_	1,6		697	-		_	2,360
Inventories		145	(20,669	۹)	_	(20,5		(762)	-		_	(21,286
Other assets		(1,719)	(20,000	-	_	(1,7		(257)			_	(1,976
Accounts and expenses payable		(23,442)	(3,586	3)	_	(27,0		1,113	(13	) .		(25,928
Liabilities payable, restricted		(20, . 12)	(2,207	,	_	(2,2		-,	-	<i>'</i>	_	(2,207
Other noncurrent liabilities and deferred inflows		5,122	(308		_	4,8		9,105	(18	) .	_	13,901
Net cash provided by operating activities	\$	250,292		7) \$	-	\$ 250,2					- \$	395,377
Noncash activity												
				_							_	
Contribution of capital assets from developers	\$	-	\$ -	- \$	-	\$	-	\$ 21,291	\$ -	\$ -	- \$	21,291

		M	larch 2017	•		March 2016							
	Debt service funds	rep	Renewal and lacement funds	С	construction funds		Debt service funds	Renewal and replacement funds			onstruction funds		
Beginning balance	\$ 210,066	\$	193,947	\$	-	\$	211,749	\$	148,458	\$	4		
Additions:													
Debt issuance:													
Bonds	-		-		429		-		-		-		
Transfer from:													
Revenue fund	98,055		73,097		-		93,658		74,272		2		
R & R fund	-		-		-		-		_		-		
Proceeds from property sales	-		151		-		-		780		-		
Total additions	98,055		73,248		429		93,658		75,052		2		
Deductions:							·		· · · · · · · · · · · · · · · · · · ·				
Interest/principal payments from sinking funds	148,691		-		-		142,721		-		-		
Increase in utility plant	, <u> </u>		72,947		-		· -		44,951		2		
Decrease in accounts payable	_		27		_		_		12,681		4		
Transfer to:									,				
Revenue fund	-		37,200		_		4,014		-		-		
Construction fund	-		-		-		-		2		-		
Debt issue costs and discounts	-		-		166		-		-		_		
Total deductions	148,691		110,174		166		146,735		57,634		6		
Ending balance	\$ 159,430	\$	157,021	\$	263	\$	158,672	\$	165,876	\$	-		
Renewal and replacement fund: Cash & investments Accounts / notes receivable:		\$	154,720					\$	164,792				
Accounts receivable			2,253						982				
Street light & other customer loans			48						102				
officer light & office customer loans		\$	157,021	-				\$	165,876	-			
Construction fund:													
Generation projects				\$	210					\$	-		
T&D and other capital projects				,	53						-		
				\$						\$	-		

	March 2017								March 2016							
	Debt service funds	rep	Renewal and placement funds		truction Inds		ronmental iunds	:	Debt service funds	-	Renewal and placement funds		struction unds	Enviror fur		
Beginning balance	\$ 173,496	\$	179,513	\$	152	\$	2,659	\$	176,569	\$	149,130	\$	664	\$	-	
Additions: Transfer from:			,						•		,					
Revenue fund	57,208		67,372		-		-		48,154		66,172		-		-	
Proceeds from property sales	-		18		-		-		-		100		-		-	
Contribution in aid of construction	-		10,301		-		-		-		10,137		-		-	
Increase in accounts payable			<u> </u>		-		294		-		-		17		246	
Total additions	57,208		77,691		-		294	_	48,154		76,409		17		246	
Deductions: Increase in utility plant	-		55,746		-		-		-		41,230		-		-	
Interest/principal payments from sinking func Transfer to:	66,100		-		-		-		67,743		-		-		-	
Revenue fund	598		-		-		-		764		-		-		-	
Decrease in accounts payable	-		13,020		-		-		-		12,543		-		-	
Total deductions	66,698		68,766		-		-		68,507		53,773		-		-	
Ending balance	\$ 164,006	\$	188,438	\$	152	\$	2,953	\$	156,216	\$	171,766	\$	681	\$	246	
Recap: Renewal and replacement fund: Cash & investments Accounts / notes receivable: Accounts receivable Notes receivable Construction fund:		\$	188,187 235 16 188,438							\$	170,813 933 20 171,766					
Project funds  Environmental fund				\$	152 152	-						\$	681 681			
Cash & investments						\$	2,953 2,953							\$	246 246	

JEA Electric System					M	onth		Prior Year Mo	Page 20
Budget vs. Actual	ΔNI	NUAL BUDGET		BUDGET		ACTUAL	Variance	ACTUAL	Variance
March 2017 and 2016	AIN	2016-17		2016-17		2016-17	%	2015-16	%
Fuel Related Revenues & Expenses		2010-17		2010-17		2010-17	70	2013-10	76
Fuel Rate Revenues	\$	472,264,680	\$	34,976,230	\$	29,444,574	-15.82% \$	29,279,748	0.56%
i dei itale itevellues	Ψ	472,204,000	Ψ	34,970,230	Ψ	23,444,574	-13.02/0 4	29,219,140	0.50 /6
Fuel Expense and Purchased Power:									
Fuel Expense - Electric System		274,434,887		23,403,345		18,847,075		17,174,296	
Fuel Expense - SJRPP		95,027,760		4,037,500		4,798,123		5,791,550	
Other Purchased Power		64,152,465		3,777,574		7,951,368		5,465,551	
Subtotal Energy Expense		433,615,112		31,218,419		31,596,566	-1.21%	28,431,397	-11.13%
Subtotal Energy Expense		433,013,112		31,210,419		31,390,300	-1.21/0	20,431,331	-11.13/6
Transfer to (from) Rate Stabilization, Net		37,705,038		_		(2,151,992)		772,093	
Fuel Related Uncollectibles		944,530		78,711		(2,101,002)		76,258	
Total		472,264,680		31,297,130		29,444,574	5.92%	29,279,748	-0.56%
Total	-	472,204,000		31,237,130		23,444,374	3.32 /0	29,219,140	-0.50 /6
Fuel Balance		_		3,679,100		_		_	
				2,212,122					
Nonfuel Related Revenues									
Base Rate Revenues		762,971,975		56,506,201		56,804,252		53,389,799	
Conservation Charge Revenue		1,000,000		74,063		17,025		28,270	
Environmental Charge Revenue		7,942,200		588,204		557,381		546,848	
Investment Income		4,631,588		385,966		900,024		(202,425)	
Natural Gas Revenue Pass Through		7,188,723		599,060		49,119		16,231	
Other Revenues		86,824,233		2,497,215		2,742,952		2,089,274	
Total	-	870,558,719		60,650,709		61,070,753	0.69%	55,867,997	9.31%
	-	,,		,,		, , , , , , , , , , , , , , , , , , , ,		,,	
Nonfuel Related Expenses									
Non-Fuel O&M		213,238,053		17,572,844		16,108,801		17,947,180	
DSM / Conservation O&M		8,081,200		665,614		606,966		655,328	
Environmental O&M		2,077,500		173,125		115,650		60,784	
Net Transfer to Rate Stabilization - DSM		(571,200)		(47,600)		(160,896)		(166,690)	
Transfer to Environmental Fund/RSF		5,864,700		488,725		441,731		486,064	
Natural Gas Expense Pass Through		6,880,298		572,520		28,326		25,571	
Debt Principal - Electric System		89,955,000		7,496,250		12,775,325		8,016,250	
Debt Interest - Electric System		100,943,917		8,411,993		8,202,894		8,523,162	
Bond Buy-Back Principal - Electric System		95,807,360		-		-		-,,	
R&R - Electric System		62,198,300		5,183,192		5,183,192		5,197,867	
Operating Capital Outlay		107,801,700		2,000,000		2.000.000		-,,	
City Contribution Expense		92,270,692		7,689,224		7,689,224		7,643,348	
Taxes & Uncollectibles		1,749,583		145,799		17,300		154,451	
Interlocal Agreements		-,,		-		-		12,000,000	
Emergency Reserve		867,320		_		_			
Nonfuel Purchased Power:		00.,020							
* SJRPP D/S Principal		26.496.875		2.208.073		2,208,083		2,331,563	
* SJRPP D/S Interest		16,193,308		1,349,442		1,317,009		1,386,626	
** Other Non-Fuel Purchased Power		40,704,113		3,392,010		2,522,696		4,359,839	
Total Nonfuel Expenses	-	870,558,719		57,301,211		59,056,301	-3.06%	68,621,343	13.94%
γ	-	,,		- / /		,,			
Non-Fuel Balance		-		3,349,498		2,014,452		(12,753,346)	
	-								-
Total Balance				7,028,598		2,014,452		(12,753,346)	_
							_		-
Total Revenues		1,342,823,399		95,626,939		90,515,327	-5.35%	85,147,745	6.30%
Total Expenses		1,342,823,399		88,598,341		88,500,875	0.11%	97,901,091	9.60%
KWH Sold - Territorial		13,020,000,000		964,269,643		914,242,000	-5.19%	893,954,000	2.27%
KWH Sold - Off System		-		-		18,115,000	2	1,914,000	
		13,020,000,000		964,269,643		932,357,000	-3.31%	895,868,000	4.07%

 $<sup>^{\</sup>star}$  Gross debt service  $^{\star\star}$  Includes transmission capacity, SJRPP and Scherer R & R, O & M  $\,$  and Investment Income.

JEA Electric System		Ye	ar-To-Date		Prior Year-To-l	Page 21 Date
Budget vs. Actual	ANNUAL BUDGET	BUDGET	ACTUAL	Variance	ACTUAL	Variance
March 2017 and 2016	2016-17	2016-17	2016-17	%	2015-16	%
Fuel Related Revenues & Expenses						
Fuel Rate Revenues	\$ 472,264,680	\$ 217,116,002	\$ 177,491,100	-18.25% \$	174,411,391	1.77%
Fuel Expense and Purchased Power:						
Fuel Expense - Electric System	274,434,887	137,573,309	111,008,968		108,486,561	
Fuel Expense - SJRPP	95,027,760	38,526,760	38,363,014		31,441,549	
Other Purchased Power	64,152,465	23,599,163	41,826,983		35,181,850	
Subtotal Energy Expense	433,615,112	199,699,232	191,198,965	4.26%	175,109,960	-9.19%
Transfer to (from) Rate Stabilization, Net	37,705,038	-	(13,717,324)		(1,016,001)	
Fuel Related Uncollectibles	944,530	472,265	9,459		317,432	
Total	472,264,680	200,171,497	177,491,100	11.33%	174,411,391	-1.77%
Fuel Balance	-	16,944,505	-		-	
Nonfuel Related Revenues						
Base Rate Revenues	762,971,975	350,763,950	328,519,998		334,207,913	
Conservation Charge Revenue	1,000,000	459,722	164,118		241,080	
Environmental Charge Revenue	7,942,200	3,651,297	3,263,622		3,453,831	
Investment Income	4,631,588	2,315,794	3,310,994		2,077,131	
Natural Gas Revenue Pass Through	7,188,723	3,594,361	255,966		75,513	
Other Revenues	86,824,233	71,840,945	76,026,639		14,157,785	
Total	870,558,719	432,626,069	411,541,337	-4.87%	354,213,253	16.18%
Nonfuel Related Expenses						
Non-Fuel O&M	213,238,053	110,346,404	91,091,192		89,181,737	
DSM / Conservation O&M	8,081,200	4,040,600	3,137,762		3,046,973	
Environmental O&M	2,077,500	1,038,750	243,298		132,195	
Net Transfer to Rate Stabilization - DSM	(571,200)	(285,600)	(279,369)		57,086	
Transfer to Environmental Fund/RSF	5,864,700	2,932,350	3,020,324		3,321,636	
Natural Gas Expense Pass Through	6,880,298	3,440,149	316,933		153,647	
Debt Principal - Electric System	89,955,000	44,977,500	53,248,051		48,097,500	
Debt Interest - Electric System	100,943,917	50,471,959	47,986,696		49,291,038	
Bond Buy-Back Principal - Electric System	95,807,360	56,857,658	69,099,658		-	
Rate Stabilization - Debt Management	-	-	(12,242,000)		-	
R&R - Electric System	62,198,300	31,099,150	31,099,150		31,187,200	
Operating Capital Outlay	107,801,700	42,000,000	42,000,000		43,084,420	
City Contribution Expense	92,270,692	46,135,346	46,135,346		45,860,091	
Taxes & Uncollectibles	1,749,583	874,791	131,154		729,031	
Interlocal Agreements	-	-	-		12,000,000	
Emergency Reserve	867,320	-	-		-	
Nonfuel Purchased Power:						
* SJRPP D/S Principal	26,496,875	13,248,438	13,248,448		13,989,375	
* SJRPP D/S Interest	16,193,308	8,096,654	7,902,055		8,538,113	
** Other Non-Fuel Purchased Power	40,704,113	20,352,056	15,357,533		18,010,238	
Total Nonfuel Expenses	870,558,719	435,626,205	411,496,231	5.54%	366,680,280	-12.22%
Non-Fuel Balance		(3,000,136)	45,106		(12,467,027)	<u>!</u>
Total Balance	-	13,944,369	45,106	<u> </u>	(12,467,027)	<u>!</u>
Total Revenues	1,342,823,399	649,742,071	589,032,437	-9.34%	528,624,644	11.43%
Total Expenses	1,342,823,399	635,797,702	588,987,331	7.36%	541,091,671	-8.85%

KWH Sold - Territorial

KWH Sold - Off System

13,020,000,000

13,020,000,000

5,326,073,000

74,869,000 5,400,942,000

-11.02%

-9.77%

5,985,732,940

5,985,732,940

5,637,590,000

17,280,000 5,654,870,000

-5.53%

-4.49%

 $<sup>^{\</sup>star}$  Gross debt service  $^{\star\star}$  Includes transmission capacity, SJRPP and Scherer R & R, O & M  $\,$  and Investment Income.

JEA										Page 22
Water and Sewer System					Мо	nth			Prior Year Mor	nth
Budget vs. Actual	ANI	NUAL BUDGET	•	BUDGET		ACTUAL	Variance		ACTUAL	Variance
March 2017 and 2016		2016-17		2016-17		2016-17	%		2015-16	%
REVENUES	_		_		_			_		
Water & Sewer Revenues	\$	405,586,412	\$	33,465,151	\$	35,485,123		\$	32,925,482	
Capacity & Extension Fees		19,000,000		1,583,333		2,106,745			1,721,479	
Capital Contributions		-		-		-			-	
Investment Income		3,152,787		262,732		578,456			388,266	
Other Income		11,638,859		1,228,720		977,815			1,214,905	
Total		439,378,058		36,539,936		39,148,139	7.14%		36,250,132	7.99%
EXPENSES										
O & M Expenses		144,148,527		13,299,315		11,441,707			12,206,159	
Debt Principal - Water & Sewer		51,020,000		4,251,667		4,251,667			2,822,916	
Debt Interest - Water & Sewer		71,552,849		5,962,737		5,934,381			5,923,321	
Rate Stabilization - Environmental		-		-		(1,649,425)			3,835,733	
R&R - Water & Sewer		22,766,900		1,897,242		1,897,242			1,735,450	
Operating Capital Outlay		92,634,428		9,712,602		9,712,602			9,275,610	
Operating Capital Outlay - Capacity/Extension		19,000,000		1,583,333		2,106,745			1,721,479	
Operating Capital Outlay - Contributions		-		-		-			-	
Operating Capital Outlay - Environmental		12,858,706		1,071,559		2,774,712			(6,630,050)	
City Contribution Expense		23,552,258		1,962,688		1,962,688			1,872,280	
Uncollectibles & Fees		844,390		70,366		636			53,000	
Interlocal Agreements		-		-		-			3,000,000	
Emergency Reserve		1,000,000		_		-			-,,,,,,,,,	
Total Expenses	-	439,378,058		39,811,509		38,432,955	3.46%		35,815,898	-7.31%
•		, ,		, ,		· · · · ·				
Total Balance	\$	-	\$	(3,271,573)	\$	715,184		\$	434,234	-
Sales kgals										
Water		36,750,000		2,990,053		3,168,217	5.96%		2,825,675	12.12%
Sewer		27,867,000		2,288,154		2,576,007	12.58%		2,258,697	14.05%
Total		64,617,000		5,278,207		5,744,224	8.83%		5,084,372	12.98%
					<del>-</del>	- D-1-	1		Delan Variata D	-1-
Budget vs. Actual	A NII	NUAL BUDGET		BUDGET	ar-1	o-Date ACTUAL	Variance		Prior Year to D	Variance
March 2017 and 2016	AIN	2016-17		2016-17		2016-17	%		2015-16	%
							,,,			,,,
REVENUES										
Water & Sewer Revenues	\$	405,586,412	•			004 440 044		\$	193,383,020	
Capacity & Extension Fees	Ψ		- 55	195 871 693	\$	204 448 844		Ψ		
Capacity a Extension 1 000			\$	195,871,693	\$	204,448,844				
Capital Contributions		19,000,000	\$	195,871,693 9,500,000	\$	10,295,268			9,757,254	
Capital Contributions		19,000,000	\$	9,500,000	\$	10,295,268 4,960			9,757,254 378,795	
Investment Income		19,000,000 - 3,152,787	<b>\$</b>	9,500,000 - 1,576,394	\$	10,295,268 4,960 3,353,030			9,757,254 378,795 1,630,772	
Investment Income Other Income		19,000,000 - 3,152,787 11,638,859	<b>\$</b>	9,500,000 - 1,576,394 6,534,982	\$	10,295,268 4,960 3,353,030 5,925,066	4.049/		9,757,254 378,795 1,630,772 8,044,188	F 099/
Investment Income		19,000,000 - 3,152,787	<b>\$</b>	9,500,000 - 1,576,394	\$	10,295,268 4,960 3,353,030	4.94%		9,757,254 378,795 1,630,772	5.08%
Investment Income Other Income Total		19,000,000 - 3,152,787 11,638,859	<b>*</b>	9,500,000 - 1,576,394 6,534,982	\$	10,295,268 4,960 3,353,030 5,925,066	4.94%		9,757,254 378,795 1,630,772 8,044,188	5.08%
Investment Income Other Income Total  EXPENSES		19,000,000 - 3,152,787 11,638,859 439,378,058	<b>*</b>	9,500,000 - 1,576,394 6,534,982 213,483,069	\$	10,295,268 4,960 3,353,030 5,925,066 224,027,168	4.94%		9,757,254 378,795 1,630,772 8,044,188 213,194,029	5.08%
Investment Income Other Income Total  EXPENSES O & M Expenses		19,000,000 - 3,152,787 11,638,859 439,378,058 144,148,527	<b>*</b>	9,500,000 - 1,576,394 6,534,982 213,483,069 72,004,589	\$	10,295,268 4,960 3,353,030 5,925,066 224,027,168	4.94%		9,757,254 378,795 1,630,772 8,044,188 213,194,029	5.08%
Investment Income Other Income Total  EXPENSES O & M Expenses Debt Principal - Water & Sewer		19,000,000 - 3,152,787 11,638,859 439,378,058 144,148,527 51,020,000	<b>*</b>	9,500,000 - 1,576,394 6,534,982 213,483,069 72,004,589 25,510,000	\$	10,295,268 4,960 3,353,030 5,925,066 224,027,168 65,844,903 25,510,000	4.94%		9,757,254 378,795 1,630,772 8,044,188 213,194,029 64,115,168 16,937,498	5.08%
Investment Income Other Income Total  EXPENSES O & M Expenses Debt Principal - Water & Sewer Debt Interest - Water & Sewer		19,000,000 - 3,152,787 11,638,859 439,378,058 144,148,527	<b>*</b>	9,500,000 - 1,576,394 6,534,982 213,483,069 72,004,589	\$	10,295,268 4,960 3,353,030 5,925,066 224,027,168 65,844,903 25,510,000 34,222,968	4.94%		9,757,254 378,795 1,630,772 8,044,188 213,194,029 64,115,168 16,937,498 34,177,223	5.08%
Investment Income Other Income Total  EXPENSES O & M Expenses Debt Principal - Water & Sewer Debt Interest - Water & Sewer Rate Stabilization - Environmental	_	19,000,000 3,152,787 11,638,859 439,378,058 144,148,527 51,020,000 71,552,849	*	9,500,000 - 1,576,394 6,534,982 213,483,069 72,004,589 25,510,000 35,776,425	\$	10,295,268 4,960 3,353,030 5,925,066 224,027,168 65,844,903 25,510,000 34,222,968 272,080	4.94%		9,757,254 378,795 1,630,772 8,044,188 213,194,029 64,115,168 16,937,498 34,177,223 3,835,733	5.08%
Investment Income Other Income Total  EXPENSES O & M Expenses Debt Principal - Water & Sewer Debt Interest - Water & Sewer Rate Stabilization - Environmental R&R - Water & Sewer	<u>—</u>	19,000,000 3,152,787 11,638,859 439,378,058 144,148,527 51,020,000 71,552,849 22,766,900	*	9,500,000 1,576,394 6,534,982 213,483,069 72,004,589 25,510,000 35,776,425 11,383,450	\$	10,295,268 4,960 3,353,030 5,925,066 224,027,168 65,844,903 25,510,000 34,222,968 272,080 11,383,450	4.94%		9,757,254 378,795 1,630,772 8,044,188 213,194,029 64,115,168 16,937,498 34,177,223 3,835,733 10,412,700	5.08%
Investment Income Other Income Total  EXPENSES O & M Expenses Debt Principal - Water & Sewer Debt Interest - Water & Sewer Rate Stabilization - Environmental R&R - Water & Sewer Operating Capital Outlay		19,000,000 3,152,787 11,638,859 439,378,058 144,148,527 51,020,000 71,552,849 22,766,900 92,634,428	*	9,500,000 1,576,394 6,534,982 213,483,069 72,004,589 25,510,000 35,776,425 - 11,383,450 55,902,751	\$	10,295,268 4,960 3,353,030 5,925,066 224,027,168 65,844,903 25,510,000 34,222,968 272,080 11,383,450 55,902,751	4.94%		9,757,254 378,795 1,630,772 8,044,188 213,194,029 64,115,168 16,937,498 34,177,223 3,835,733 10,412,700 55,697,749	5.08%
Investment Income Other Income Total  EXPENSES O & M Expenses Debt Principal - Water & Sewer Debt Interest - Water & Sewer Rate Stabilization - Environmental R&R - Water & Sewer Operating Capital Outlay Operating Capital Outlay - Capacity/Extension		19,000,000 3,152,787 11,638,859 439,378,058 144,148,527 51,020,000 71,552,849 22,766,900	*	9,500,000 1,576,394 6,534,982 213,483,069 72,004,589 25,510,000 35,776,425 11,383,450	\$	10,295,268 4,960 3,353,030 5,925,066 224,027,168 65,844,903 25,510,000 34,222,968 272,080 11,383,450 55,902,751 10,295,268	4.94%		9,757,254 378,795 1,630,772 8,044,188 213,194,029 64,115,168 16,937,498 34,177,223 3,835,733 10,412,700 55,697,749 9,757,254	5.08%
Investment Income Other Income Total  EXPENSES O & M Expenses Debt Principal - Water & Sewer Debt Interest - Water & Sewer Rate Stabilization - Environmental R&R - Water & Sewer Operating Capital Outlay Operating Capital Outlay - Capacity/Extension Operating Capital Outlay - Contributions		19,000,000 3,152,787 11,638,859 439,378,058 144,148,527 51,020,000 71,552,849 22,766,900 92,634,428	*	9,500,000 1,576,394 6,534,982 213,483,069 72,004,589 25,510,000 35,776,425 - 11,383,450 55,902,751 9,500,000	\$	10,295,268 4,960 3,353,030 5,925,066 224,027,168 65,844,903 25,510,000 34,222,968 272,080 11,383,450 55,902,751 10,295,268 4,960	4.94%		9,757,254 378,795 1,630,772 8,044,188 213,194,029 64,115,168 16,937,498 34,177,223 3,835,733 10,412,700 55,697,749 9,757,254 378,795	5.08%
Investment Income Other Income Total  EXPENSES O & M Expenses Debt Principal - Water & Sewer Debt Interest - Water & Sewer Rate Stabilization - Environmental R&R - Water & Sewer Operating Capital Outlay Operating Capital Outlay - Capacity/Extension Operating Capital Outlay - Contributions Operating Capital Outlay - Environmental		19,000,000 3,152,787 11,638,859 439,378,058 144,148,527 51,020,000 71,552,849 22,766,900 92,634,428	-	9,500,000 1,576,394 6,534,982 213,483,069 72,004,589 25,510,000 35,776,425 - 11,383,450 55,902,751	\$	10,295,268 4,960 3,353,030 5,925,066 224,027,168 65,844,903 25,510,000 34,222,968 272,080 11,383,450 55,902,751 10,295,268	4.94%		9,757,254 378,795 1,630,772 8,044,188 213,194,029 64,115,168 16,937,498 34,177,223 3,835,733 10,412,700 55,697,749 9,757,254	5.08%
Investment Income Other Income Total  EXPENSES O & M Expenses Debt Principal - Water & Sewer Debt Interest - Water & Sewer Rate Stabilization - Environmental R&R - Water & Sewer Operating Capital Outlay Operating Capital Outlay - Capacity/Extension Operating Capital Outlay - Contributions		19,000,000 3,152,787 11,638,859 439,378,058 144,148,527 51,020,000 71,552,849 	***************************************	9,500,000 1,576,394 6,534,982 213,483,069 72,004,589 25,510,000 35,776,425 - 11,383,450 55,902,751 9,500,000	*	10,295,268 4,960 3,353,030 5,925,066 224,027,168 65,844,903 25,510,000 34,222,968 272,080 11,383,450 55,902,751 10,295,268 4,960	4.94%		9,757,254 378,795 1,630,772 8,044,188 213,194,029 64,115,168 16,937,498 34,177,223 3,835,733 10,412,700 55,697,749 9,757,254 378,795	5.08%
Investment Income Other Income Total  EXPENSES O & M Expenses Debt Principal - Water & Sewer Debt Interest - Water & Sewer Rate Stabilization - Environmental R&R - Water & Sewer Operating Capital Outlay Operating Capital Outlay - Capacity/Extension Operating Capital Outlay - Contributions Operating Capital Outlay - Environmental	=	19,000,000 3,152,787 11,638,859 439,378,058 144,148,527 51,020,000 71,552,849 	***************************************	9,500,000 1,576,394 6,534,982 213,483,069 72,004,589 25,510,000 35,776,425 - 11,383,450 55,902,751 9,500,000 - 6,429,353	\$	10,295,268 4,960 3,353,030 5,925,066 224,027,168 65,844,903 25,510,000 34,222,968 272,080 11,383,450 55,902,751 10,295,268 4,960 6,548,527	4.94%		9,757,254 378,795 1,630,772 8,044,188 213,194,029 64,115,168 16,937,498 34,177,223 3,835,733 10,412,700 55,697,749 9,757,254 378,795 2,144,039	5.08%
Investment Income Other Income Total  EXPENSES O & M Expenses Debt Principal - Water & Sewer Debt Interest - Water & Sewer Rate Stabilization - Environmental R&R - Water & Sewer Operating Capital Outlay Operating Capital Outlay - Capacity/Extension Operating Capital Outlay - Contributions Operating Capital Outlay - Environmental City Contribution Expense	=	19,000,000 3,152,787 11,638,859 439,378,058 144,148,527 51,020,000 71,552,849 - 22,766,900 92,634,428 19,000,000 - 12,858,706 23,552,258	***	9,500,000 1,576,394 6,534,982 213,483,069 72,004,589 25,510,000 35,776,425 	\$	10,295,268 4,960 3,353,030 5,925,066 224,027,168 65,844,903 25,510,000 34,222,968 272,080 11,383,450 55,902,751 10,295,268 4,960 6,548,527 11,776,129	4.94%		9,757,254 378,795 1,630,772 8,044,188 213,194,029 64,115,168 16,937,498 34,177,223 3,835,733 10,412,700 55,697,749 9,757,254 378,795 2,144,039 11,233,678	5.08%
Investment Income Other Income Total  EXPENSES  O & M Expenses Debt Principal - Water & Sewer Debt Interest - Water & Sewer Rate Stabilization - Environmental R&R - Water & Sewer Operating Capital Outlay Operating Capital Outlay - Capacity/Extension Operating Capital Outlay - Contributions Operating Capital Outlay - Environmental City Contribution Expense Uncollectibles & Fees		19,000,000 3,152,787 11,638,859 439,378,058 144,148,527 51,020,000 71,552,849 - 22,766,900 92,634,428 19,000,000 - 12,858,706 23,552,258	***	9,500,000 1,576,394 6,534,982 213,483,069 72,004,589 25,510,000 35,776,425 	\$	10,295,268 4,960 3,353,030 5,925,066 224,027,168 65,844,903 25,510,000 34,222,968 272,080 11,383,450 55,902,751 10,295,268 4,960 6,548,527 11,776,129 1,724	4.94%		9,757,254 378,795 1,630,772 8,044,188 213,194,029 64,115,168 16,937,498 34,177,223 3,835,733 10,412,700 55,697,749 9,757,254 378,795 2,144,039 11,233,678 320,847	5.08%
Investment Income Other Income Total  EXPENSES O & M Expenses Debt Principal - Water & Sewer Debt Interest - Water & Sewer Rate Stabilization - Environmental R&R - Water & Sewer Operating Capital Outlay Operating Capital Outlay - Capacity/Extension Operating Capital Outlay - Contributions Operating Capital Outlay - Environmental City Contribution Expense Uncollectibles & Fees Interlocal Agreements		19,000,000 3,152,787 11,638,859 439,378,058 144,148,527 51,020,000 71,552,849 22,766,900 92,634,428 19,000,000  12,858,706 23,552,258 844,390	***	9,500,000 1,576,394 6,534,982 213,483,069 72,004,589 25,510,000 35,776,425 	\$	10,295,268 4,960 3,353,030 5,925,066 224,027,168 65,844,903 25,510,000 34,222,968 272,080 11,383,450 55,902,751 10,295,268 4,960 6,548,527 11,776,129 1,724	2.91%		9,757,254 378,795 1,630,772 8,044,188 213,194,029 64,115,168 16,937,498 34,177,223 3,835,733 10,412,700 55,697,749 9,757,254 378,795 2,144,039 11,233,678 320,847	5.08%
Investment Income Other Income Total  EXPENSES O & M Expenses Debt Principal - Water & Sewer Debt Interest - Water & Sewer Rate Stabilization - Environmental R&R - Water & Sewer Operating Capital Outlay Operating Capital Outlay - Capacity/Extension Operating Capital Outlay - Contributions Operating Capital Outlay - Environmental City Contribution Expense Uncollectibles & Fees Interlocal Agreements Emergency Reserve Total Expenses		19,000,000 3,152,787 11,638,859 439,378,058 144,148,527 51,020,000 71,552,849 22,766,900 92,634,428 19,000,000 - 12,858,706 23,552,258 844,390 - 1,000,000		9,500,000 1,576,394 6,534,982 213,483,069 72,004,589 25,510,000 35,776,425 		10,295,268 4,960 3,353,030 5,925,066 224,027,168 65,844,903 25,510,000 34,222,968 272,080 11,383,450 55,902,751 10,295,268 4,960 6,548,527 11,776,129 1,724 287,373 2222,050,133	2.91%		9,757,254 378,795 1,630,772 8,044,188 213,194,029 64,115,168 16,937,498 34,177,223 3,835,733 10,412,700 55,697,749 9,757,254 378,795 2,144,039 11,233,678 320,847 3,000,000	
Investment Income Other Income Total  EXPENSES O & M Expenses Debt Principal - Water & Sewer Debt Interest - Water & Sewer Rate Stabilization - Environmental R&R - Water & Sewer Operating Capital Outlay Operating Capital Outlay - Capacity/Extension Operating Capital Outlay - Contributions Operating Capital Outlay - Environmental City Contribution Expense Uncollectibles & Fees Interlocal Agreements Emergency Reserve	\$	19,000,000 3,152,787 11,638,859 439,378,058 144,148,527 51,020,000 71,552,849 22,766,900 92,634,428 19,000,000 - 12,858,706 23,552,258 844,390 - 1,000,000	\$	9,500,000 1,576,394 6,534,982 213,483,069 72,004,589 25,510,000 35,776,425 11,383,450 55,902,751 9,500,000 - 6,429,353 11,776,129 422,195		10,295,268 4,960 3,353,030 5,925,066 224,027,168 65,844,903 25,510,000 34,222,968 272,080 11,383,450 55,902,751 10,295,268 4,960 6,548,527 11,776,129 1,724 287,373	2.91%	\$	9,757,254 378,795 1,630,772 8,044,188 213,194,029 64,115,168 16,937,498 34,177,223 3,835,733 10,412,700 55,697,749 9,757,254 378,795 2,144,039 11,233,678 320,847 3,000,000	
Investment Income Other Income Total  EXPENSES O & M Expenses Debt Principal - Water & Sewer Debt Interest - Water & Sewer Rate Stabilization - Environmental R&R - Water & Sewer Operating Capital Outlay Operating Capital Outlay - Capacity/Extension Operating Capital Outlay - Contributions Operating Capital Outlay - Environmental City Contribution Expense Uncollectibles & Fees Interlocal Agreements Emergency Reserve Total Expenses	\$	19,000,000 3,152,787 11,638,859 439,378,058 144,148,527 51,020,000 71,552,849 22,766,900 92,634,428 19,000,000 - 12,858,706 23,552,258 844,390 - 1,000,000		9,500,000 1,576,394 6,534,982 213,483,069 72,004,589 25,510,000 35,776,425 		10,295,268 4,960 3,353,030 5,925,066 224,027,168 65,844,903 25,510,000 34,222,968 272,080 11,383,450 55,902,751 10,295,268 4,960 6,548,527 11,776,129 1,724 287,373 2222,050,133	2.91%	\$	9,757,254 378,795 1,630,772 8,044,188 213,194,029 64,115,168 16,937,498 34,177,223 3,835,733 10,412,700 55,697,749 9,757,254 378,795 2,144,039 11,233,678 320,847 3,000,000	

36,750,000 27,867,000 64,617,000

Water

Sewer Total 17,134,900 13,046,444

30,181,344

17,680,067 14,445,713 32,125,780 3.18% 10.73% 6.44% 16,350,744 13,253,384 29,604,128

8.13% 9.00% 8.52%

JEA District Energy System				Ma	onth		1	Prior Year Moi	Page 23
Budget vs. Actual March 2017 and 2016	ANNU	JAL BUDGET 2016-17	BUDGET 2016-17	ET ACTUAL Variance			ACTUAL 2015-16	Variance %	
REVENUES									
Revenues	\$	9,247,921	\$ 609,186	\$	589,753		\$	567,542	
Investment Income		-	-		4,566			1,726	
Total		9,247,921	609,186		594,319	-2.44%		569,268	4.40%
EXPENSES									
O & M Expenses		5,252,918	358,129		289,565			285,394	
Debt Principal - DES		1,640,000	136,667		136,667			135,417	
Debt Interest - DES		1,382,454	115,205		115,204			116,582	
R&R - DES		437,650	36,471		36,471			36,596	
Operating Capital Outlay		534,899	-		-			-	
Total Expenses		9,247,921	646,472		577,907	10.61%		573,989	-0.68%
Total Balance	\$	-	\$ (37,286)	\$	16,412		\$	(4,721)	

		Yea	ar-T	o-Date		Pr	ior-Year-To-l	Date
Budget vs. Actual March 2017 and 2016	JAL BUDGET 2016-17	BUDGET 2016-17		ACTUAL 2016-17	Variance %		L )15-16	Variance %
REVENUES								
Revenues	\$ 9,247,921	\$ 4,256,043	\$	4,053,714		\$	3,993,197	
Investment Income	-	· · · -		13,526			10,581	
Total	 9,247,921	4,256,043		4,067,240	-4.44%		4,003,778	1.59%
EXPENSES								
O & M Expenses	5,252,918	2,280,209		2,029,603			2,160,109	
Debt Principal - DES	1,640,000	820,000		820,000			812,500	
Debt Interest - DES	1,382,454	691,227		691,227			699,490	
R&R - DES	437,650	218,825		218,825			219,575	
Operating Capital Outlay	534,899	-		-			-	
Total Expenses	 9,247,921	4,010,261		3,759,655	6.25%		3,891,674	3.39%
Total Balance	\$ _	\$ 245,782	\$	307,585		\$	112,104	

Electric System

Schedule of Debt Service Coverage

(in thousands - unaudited)

			nth			Year-t		е
			ırch	2012		Ma	rch	0040
Revenues		2017		2016		2017		2016
Electric	\$	91.441	\$	87,554	\$	538,185	\$	538,646
Investment income (1)	Ψ	781	Ψ	(180)	Ψ	2,627	Ψ	1,471
Earnings from The Energy Authority		887		206		3,164		1,464
Other, net (2)		2,236		1.759		12.942		12,240
Plus: amount paid from the rate stabilization fund into the revenue fund		3,710		1,170		35,457		60,169
Less: amount paid from the revenue fund into the rate stabilization fund		(888)		(1,747)		(8,724)		(62,018)
Total revenues		98,167		88,762		583,651		551,972
Operating expenses (3)								
Fuel		18,847		17,175		111,009		108.487
Purchased power (4)		20,935		20,091		124,363		109,595
Other operation and maintenance		17,354		18,923		92,989		92,884
State utility taxes and franchise fees		4,089		4,439		26,474		26,851
Total operating expenses	-	61,225		60,628		354,835		337,817
Total operating expenses		01,220		00,020		334,033		337,017
Net revenues	\$	36,942	\$	28,134	\$	228,816	\$	214,155
Debt service	\$	5,956	\$	6,573	\$	35,726	\$	39,209
Less: investment income on sinking fund		(121)		19		(699)		(629)
Less: Build America Bonds subsidy		(126)		(126)		(758)		(759)
Debt service requirement	\$	5,709	\$	6,466	\$	34,269	\$	37,821
Senior debt service coverage (5), (min 1.20x)		6.47	х	4.35 >	<	6.68	ĸ	5.66 x
Net revenues (from above)	\$	36,942	\$	28,134	\$	228,816	\$	214,155
Debt service requirement (from above)	\$	5.709	\$	6,466	\$	34,269	\$	37,821
Plus: aggregate subordinated debt service on outstanding subordinated bonds	*	13,390	•	8,185	•	57,488		49,070
Less: Build American Bonds subsidy		(173)		(174)		(1,035)		(1,042)
Total debt service requirement and aggregate subordinated debt service	\$	18,926	\$	14,477	\$	90,722	\$	85,849
Senior and subordinated debt service coverage (6), (min 1.15x)		1.95	х	1.94 >	<	2.52	x	2.49 x
Fixed charge coverage (7)		1.45	Υ	0.69 >	<u> </u>	1.79	×	1.62 x
· Mod ond go octorage (1)		1.70	^	0.00 /	`	1.13	`	1.02 X

<sup>(1)</sup> Excludes investment income on sinking funds.

<sup>(2)</sup> Excludes the Build America Bonds subsidy.

<sup>(3)</sup> Excludes depreciation and recognition of deferred costs and revenues, net.

<sup>(4)</sup> In accordance with the requirements of the Electric System Resolution, all the contract debt payments from the Electric System to the SJRPP and Bulk Power Supply System with respect to the use by the Electric System of the capacity and output of the SJRPP and Bulk Power Systems are reflected as a purchased power expense on these schedules. These schedules do not include revenues of the SJRPP and Bulk Power Supply System, except that the purchased power expense is net of interest income on funds maintained under the SJRPP and Bulk Power Supply System resolutions.

<sup>(5)</sup> Net revenues divided by debt service requirement. Minimum annual coverage is 1.20x.

<sup>(6)</sup> Net revenues divided by total debt service requirement and aggregate subordinated debt service. Minimum annual coverage is 1.15x.

<sup>(7)</sup> Net revenues plus JEA's share of SJRPP's and Bulk Power Supply System's debt service less city contribution divided by the sum of the adjusted debt service requirement and JEA's share of SJRPP's and Bulk Power Supply System's debt service.

			nth rch			o-Date	•		
		2017		2016		2017		2016	
Revenues									
JEA	\$	4,783	\$	6,499	\$	32,063	\$	32,078	
Investment Income		15		14		66		65	
Total revenues		4,798		6,513		32,129		32,143	
Operating expenses (1)									
Fuel		3,296		2,008		18,403		14,568	
Other operations and maintenance		1,225		2,018		6,920		8,035	
Total operating expenses		4,521		4,026		25,323		22,603	
Net revenues	\$	277	\$	2,487	\$	6,806	\$	9,540	
Aggregate debt service	\$	807	\$	897	\$	4,840	\$	5,379	
Less: Build America Bonds subsidy	·	(59)		(61)		(350)		(369)	
Aggregate debt service	\$	748	\$	836	\$	4,490	\$	5,010	
Debt service coverage (2)		0.37	X	2.97	X	1.52	X	1.90	

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

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

		nth irch			r-to-Date ⁄Iarch				
	2017		2016		2017		2016		
Revenues									
JEA	\$ 9,274	\$	9,468	\$	54,821	\$	47,980		
FPL	9,704		9,303		56,534		55,642		
Investment income	399		242		1,855		1,828		
Total revenues	 19,377		19,013		113,210		105,450		
Operating expenses (1)									
Fuel	8,585		10,101		64,138		57,336		
Other operations and maintenance	4,782		2,418		19,258		15,630		
Total operating expenses	 13,367		12,519		83,396		72,966		
Net revenues	\$ 6,010	\$	6,494	\$	29,814	\$	32,484		
Aggregate debt service	\$ 3,960	\$	4,344	\$	23,760	\$	26,062		
Debt service coverage (2)	 1.52	X	1.49	Х	1.25	X	1.25		

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

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

			nth rch			o-Date		
		2017		2016		2017		2016
Revenues								
JEA	\$	1,550	\$	1,533	\$	7,286	\$	7,255
Investment income		50		26		127		98
Total revenues		1,600		1,559		7,413		7,353
Operating expenses		-		-		-		-
Net revenues	\$	1,600	\$	1,559	\$	7,413	\$	7,353
Aggregate debt service	\$	1.079	\$	1,037	\$	6,475	\$	6,443
Less: Build America Bonds subsidy	•	(32)	•	(34)	•	(195)	•	(205)
Aggregate debt service	\$	1,047	\$	1,003	\$	6,280	\$	6,238
Debt service coverage (1)		1.53	x	1.55	x	1.18	x	1.18

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

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

<sup>(2)</sup> Net revenues divided by aggregate debt service. Semiannual minimum coverage is 1.25x.

Water and Sewer Schedule of Debt Service Coverage

(in thousands - unaudited)

·			onth			Year-t		ate	
			arch				rch		
Revenues		2017		2016		2017		2016	
Water	\$	14,530	\$	13,414	\$	84,110	\$	78,692	
Water capacity fees (1)	Ф	798	Ф	629	Φ	3.659	Ф	76,692 3,482	
Sewer		21.823		20,289		125,400		119,292	
Sewer capacity fees (1)		1,309		1,093		6,636		6,275	
Investment Income		582		392		3.374		1.652	
						-,-		,	
Other (2)		766		1,003		4,659		6,773	
Plus: amounts paid from the rate stabilization fund into the revenue fund		3,597		6,561		11,034		6,561	
Less: amounts paid from the revenue fund into the rate stabilization fund		(1,954)		(1,809)		(11,392)		(10,665)	
Total revenues		41,451		41,572		227,480		212,062	
Operating expenses									
Operations and maintenance (3)		11,998		13,217		71,372		71,710	
Total operating expenses		11,998		13,217		71,372		71,710	
Net revenues	\$	29,453	\$	28,355	\$	156,108	\$	140,352	
Aggregate debt service	\$	8.143	\$	7.100	\$	48.798	\$	42,515	
Less: Build America Bonds subsidy	•	(209)	•	(209)	•	(1,250)	•	(1,251)	
Aggregate debt service	\$	7,934	\$	6,891	\$	47,548	\$	41,264	
Senior debt service coverage (4), (min 1.25x)		3.71	Х	4.11	X	3.28	X	3.40 x	
Net revenues (from above)	\$	29,453	\$	28,355	\$	156,108	\$	140,352	
Aggregate debt service (from above)	\$	7,934	\$	6,891	\$	47,548	\$	41,264	
Plus: aggregate subordinated debt service on outstanding subordinated debt	Ψ	1,471	Ψ	1.040	Ψ	8,766	Ψ	6,182	
Total aggregate debt service and aggregate subordinated debt service	\$	9,405	\$	7,931	\$	56,314	\$	47,446	
Senior and subordinated debt service coverage (5)		3.13	Х	3.58	x	2.77	X	2.96 x	
Fixed charge coverage		2.92	,	2.96 >	,	2.56 x	,	2.66 x	
Fixed Charge Coverage		2.92	١.	2.90 X		2.50 X		2.00 X	

- (1) Effective October 1, 2001, the Water and Sewer Bond Resolution was amended to include capacity fees in total revenues. Had such capacity fees not been included in the calculation for the year-to-date periods ending March 2017 and 2016, then the debt service coverage would have been 2.59x and 2.75x.
- (2) Excludes the Build America Bonds subsidy.
- (3) Excludes depreciation and recognition of deferred costs and revenues, net.
- (4) Net revenues divided by aggregate debt service. Minimum annual coverage is 1.25x.
- (5) Net revenues divided by total aggregate debt service and aggregate subordinated debt service. Minimum annual coverage is either 1.00x aggregate debt service and aggregate subordinated debt service (excluding capacity charges) or the sum of 1.00x aggregate debt service and 1.20x aggregate subordinated debt service (including capacity charges). Based on the first requirement, minimum annual coverage is 2.59x and 2.75x. Based on the second requirement, net revenues must exceed 100% of aggregate debt service and 120% of aggregate subordinated debt service, or \$58,067 and \$48,682 for the year-to-date periods ending March 2017 and 2016.

District Energy System Schedule of Debt Service Coverage

			onth arch				o-Date		
	2	2017		2016		2017		2016	
Revenues									
Service revenues	\$	590	\$	568	\$	4,054	\$	3,993	
Investment income		5		2		14		11	
Total revenues		595		570		4,068		4,004	
Operating expenses (1)									
Operations and maintenance		291		283		2,036		2,145	
otal operating expenses		291		283		2,036		2,145	
Net revenues	\$	304	\$	287	\$	2,032	\$	1,859	
Aggregate debt service (2)	\$	252	\$	252	\$	1,511	\$	1,512	
Debt service coverage (3) (min 1.15x)		1.21	X	1.14	X	1.34	K	1.23	

- (1) Excludes depreciation.
- (2) On June 19, 2013, the closing date of the District Energy System Refunding Revenue Bonds, 2013 Series A, the JEA covenanted to deposit into the 2013 Series A Bonds Subaccount from Available Water and Sewer System Revenues an amount equal to the Aggregate DES Debt Service Deficiency that exists with respect to the 2013 Series A Bonds, in the event that the amount on deposit in the Debt Service Account in the Debt Service Fund in accordance with the District Energy System Resolution is less than Accrued Aggregate Debt Service as of the last business day of the then current month.
- (3) Net Revenues divided by aggregate debt service. Minimum annual coverage is 1.15x.

January Assessment Communication Communicati	Interest Dates	Principal	Par Amount Principal	Current Portion of
Issue/Average Coupon Rate lectric System - Fixed Rate Bonds	Interest Rates	Payment Dates	Outstanding	Long-Term De
Series Three 2004 A	5.000%	2039	\$ 5,000	\$
Series Three 2004 A Series Three 2005 B	4.750%			φ
		2033	100,000	0.055.00
Series Three 2009 C	5.000%	2017	3,355,000	3,355,0
Series Three 2009 D	6.056%	2033-2044	45,955,000	
Series Three 2010 A	4.000%	2017-2020	14,980,000	4,915,0
Series Three 2010 C	4.000 - 4.500%	2021-2031	8,975,000	
Series Three 2010 D	4.000 - 5.000%	2017-2038	79,470,000	4,635,0
Series Three 2010 E	5.350 - 5.482%	2028-2040	34,255,000	
Series Three 2012A	4.000 - 4.500%	2023-2033	60,750,000	
Series Three 2012B	2.000 - 5.000%	2017-2039	128,250,000	615,0
Series Three 2013A	2.500 - 5.000%	2017-2026	93,815,000	8,625,0
Series Three 2013B	1.875 - 5.000%	2021-2038	7,500,000	0,020,0
Series Three 2013C				2 460 0
	4.000 - 5.000%	2017-2030	28,685,000	2,460,0
Series Three 2014A	2.600 - 5.000%	2017-2034	32,305,000	2,050,0
Series Three 2015A	2.500 - 5.000%	2017-2041	79,495,000	140,0
Series Three 2015B	3.000 - 5.000%	2017-2031	36,005,000	6,480,0
Series Three 2017A	5.000%	2019	18,670,000	
Total Fixed Rate Senior Bonds			672,570,000	33,275,0
2009 Series A	5.625%	2029-2032	21,140,000	
2009 Series D	5.000%	2017-2018	23,925,000	12,265,0
2009 Series E	4.000%	2017-2018		1,920,0
			2,215,000	
2009 Series F	4.625 - 6.406%	2017-2034	64,670,000	1,000,0
2009 Series G	4.000 - 5.000%	2018-2021	16,090,000	
2010 Series A	3.000%	2017	710,000	710,0
2010 Series B	3.000 - 5.000%	2017-2024	7,535,000	900,0
2010 Series C	3.125 - 4.000%	2020-2027	4,385,000	
2010 Series D	3.500 - 5.582%	2017-2027	45,575,000	1,450,0
2012 Series A	3.000 - 5.000%	2017-2033	88,500,000	4,590,0
2012 Series B	2.250 - 5.000%	2017-2037	93,750,000	3,970,0
2013 Series A	2.500 - 5.000%	2017-2030	54,110,000	295,0
2013 Series B	2.500 - 5.000%	2017-2026	25,385,000	2,625,0
2013 Series C	1.375 - 5.000%	2017-2038	80,390,000	2,060,0
2013 Series D	2.625 - 5.250%	2017-2035	124,025,000	10,390,0
2014 Series A	4.000 - 5.000%	2017-2039	206,105,000	11,210,0
2017 Series A	2.000 - 5.000%	2017-2019	71,735,000	39,945,0
Total Fixed Rate Subordinated Bonds			930,245,000	93,330,0
Total Fixed Rate Electric System Bonds/4	.619%		1,602,815,000	126,605,0
ectric System - Variable Rate Bonds	Current Interest Rates (1)			
Series Three 2008 A	0.722%	2027-2036	51,680,000	
Series Three 2008 B-1	1.111%	2017-2040	60,395,000	375,0
Series Three 2008 B-2	0.722%	2025-2040	41,900,000	0,0,0
Series Three 2008 B-3	0.722%	2024-2036	37,000,000	
Series Three 2008 B-4	1.111%	2017-2036	49,810,000	400,0
Series Three 2008 C-1	0.724%	2024-2034	44,145,000	
Series Three 2008 C-2	0.724%	2024-2034	43,900,000	
Series Three 2008 C-3	0.740%	2030-2038	25,000,000	
Series Three 2008 D-1	1.111%	2017-2036	111,420,000	2,520,0
Total Variable Rate Senior Bonds			465,250,000	3,295,0
Series 2000 A	0.790%	2021-2035		3,233,0
			30,965,000	
Series 2000 F-1	0.761%	2026-2030	37,200,000	
Series 2000 F-2	0.783%	2026-2030	24,800,000	
Series 2008 D	0.655%	2024-2038	39,455,000	
Total Variable Rate Subordinated Bonds			132,420,000	
Total Variable Rate Bonds			597,670,000	3,295,0
Total Electric System Bonds			2,200,485,000	129,900,0
. Johns River Power Park - Fixed Rate Bonds				
Issue 2 Series 17	4.700%	2019	100,000	
Issue 2 Series 18	4.500%	2018	50,000	
Issue 2 Series 19	4.600%	2017	100,000	100,0
Issue 2 Series 20	4.500%	2021	100,000	100,0
10000 2 001100 20				
Issue 2 Series 21	5.000%	2021	5,000	
Issue 2 Series 22	4.000%	2019	5,000	
	3.000 - 5.000%	2017-2021	64,910,000	23,205,0
Issue 2 Series 23	4.0000/	2017-2021	29,625,000	16,350,0
Issue 2 Series 23 Issue 2 Series 24	4.000%		45,000	
	3.000%	2021		
Issue 2 Series 24	3.000%			
Issue 2 Series 24 Issue 2 Series 25 Issue 2 Series 26	3.000% 2.000 - 5.000%	2019-2021	65,970,000	
Issue 2 Series 24 Issue 2 Series 25 Issue 2 Series 26 Issue 2 Series 27	3.000% 2.000 - 5.000% 1.888 - 2.505%	2019-2021 2019-2021	65,970,000 7,025,000	
Issue 2 Series 24 Issue 2 Series 25 Issue 2 Series 26 Issue 2 Series 27 Issue 3 Series 1	3.000% 2.000 - 5.000% 1.888 - 2.505% 4.500%	2019-2021 2019-2021 2037	65,970,000 7,025,000 100,000	
Issue 2 Series 24 Issue 2 Series 25 Issue 2 Series 26 Issue 2 Series 27 Issue 3 Series 1 Issue 3 Series 2	3.000% 2.000 - 5.000% 1.888 - 2.505% 4.500% 5.000%	2019-2021 2019-2021 2037 2034-2037	65,970,000 7,025,000 100,000 29,370,000	
Issue 2 Series 24 Issue 2 Series 25 Issue 2 Series 26 Issue 2 Series 27 Issue 3 Series 1	3.000% 2.000 - 5.000% 1.888 - 2.505% 4.500%	2019-2021 2019-2021 2037	65,970,000 7,025,000 100,000	1,675,0
Issue 2 Series 24 Issue 2 Series 25 Issue 2 Series 26 Issue 2 Series 27 Issue 3 Series 1 Issue 3 Series 2	3.000% 2.000 - 5.000% 1.888 - 2.505% 4.500% 5.000%	2019-2021 2019-2021 2037 2034-2037	65,970,000 7,025,000 100,000 29,370,000	1,675,0
Issue 2 Series 24 Issue 2 Series 25 Issue 2 Series 26 Issue 2 Series 27 Issue 3 Series 1 Issue 3 Series 2 Issue 3 Series 4 Issue 3 Series 6	3.000% 2.000 - 5.000% 1.888 - 2.505% 4.500% 5.000% 4.200 - 5.450% 2.375 - 5.000%	2019-2021 2019-2021 2037 2034-2037 2017-2028 2019-2037	65,970,000 7,025,000 100,000 29,370,000 24,085,000 91,330,000	1,675,0
Issue 2 Series 24 Issue 2 Series 25 Issue 2 Series 26 Issue 2 Series 27 Issue 3 Series 1 Issue 3 Series 2 Issue 3 Series 4 Issue 3 Series 6 Issue 3 Series 7	3.000% 2.000 - 5.000% 1.888 - 2.505% 4.500% 5.000% 4.200 - 5.450% 2.375 - 5.000% 2.000 - 5.000%	2019-2021 2019-2021 2037 2034-2037 2017-2028 2019-2037 2019-2033	65,970,000 7,025,000 100,000 29,370,000 24,085,000 91,330,000 79,500,000	1,675,0
Issue 2 Series 24 Issue 2 Series 25 Issue 2 Series 26 Issue 2 Series 27 Issue 3 Series 1 Issue 3 Series 1 Issue 3 Series 4 Issue 3 Series 6 Issue 3 Series 6 Issue 3 Series 7 Issue 3 Series 8	3.000% 2.000 - 5.000% 1.888 - 2.505% 4.500% 5.000% 4.200 - 5.450% 2.375 - 5.000% 2.000 - 5.000% 2.000 - 5.000%	2019-2021 2019-2021 2037 2034-2037 2017-2028 2019-2037	65,970,000 7,025,000 100,000 29,370,000 24,085,000 91,330,000 79,500,000 57,895,000	
Issue 2 Series 24 Issue 2 Series 25 Issue 2 Series 26 Issue 2 Series 27 Issue 3 Series 1 Issue 3 Series 1 Issue 3 Series 4 Issue 3 Series 6 Issue 3 Series 7 Issue 3 Series 8 Total Fixed Rate St. Johns River Power P	3.000% 2.000 - 5.000% 1.888 - 2.505% 4.500% 5.000% 4.200 - 5.450% 2.375 - 5.000% 2.000 - 5.000% 2.000 - 5.000%	2019-2021 2019-2021 2037 2034-2037 2017-2028 2019-2037 2019-2033	65,970,000 7,025,000 100,000 29,370,000 24,085,000 91,330,000 79,500,000	
Issue 2 Series 24 Issue 2 Series 25 Issue 2 Series 26 Issue 2 Series 27 Issue 3 Series 1 Issue 3 Series 1 Issue 3 Series 4 Issue 3 Series 6 Issue 3 Series 6 Issue 3 Series 7 Issue 3 Series 7 Issue 7 Series 8 Total Fixed Rate St. Johns River Power Pulk Power Supply System, Scherer 4 Project -	3.000% 2.000 - 5.000% 1.888 - 2.505% 4.500% 5.000% 4.200 - 5.450% 2.375 - 5.000% 2.000 - 5.000% ark Bonds/4.094% Fixed Rate Bonds	2019-2021 2019-2021 2037 2034-2037 2017-2028 2019-2037 2019-2033 2019-2039	65,970,000 7,025,000 100,000 29,370,000 24,085,000 91,330,000 79,500,000 57,895,000 450,215,000	41,330,0
Issue 2 Series 24 Issue 2 Series 25 Issue 2 Series 26 Issue 2 Series 27 Issue 3 Series 1 Issue 3 Series 1 Issue 3 Series 4 Issue 3 Series 4 Issue 3 Series 6 Issue 3 Series 8 Total Fixed Rate St. Johns River Power P JIK Power Supply System, Scherer 4 Project - Series 2010A	3.000% 2.000 - 5.000% 1.888 - 2.505% 4.500% 5.000% 4.200 - 5.450% 2.375 - 5.000% 2.000 - 5.000% 2.000 - 5.000% ark Bonds/4.094% Fixed Rate Bonds 4.250 - 5.920%	2019-2021 2019-2021 2037 2034-2037 2017-2028 2019-2037 2019-2033 2019-2039	65,970,000 7,025,000 100,000 29,370,000 24,085,000 91,330,000 79,500,000 57,895,000 450,215,000	<b>41,330,0</b> 2,475,0
Issue 2 Series 24 Issue 2 Series 25 Issue 2 Series 26 Issue 2 Series 27 Issue 3 Series 1 Issue 3 Series 1 Issue 3 Series 4 Issue 3 Series 6 Issue 3 Series 6 Issue 3 Series 7 Issue 3 Series 7 Issue 7 Series 8 Total Fixed Rate St. Johns River Power Pulk Power Supply System, Scherer 4 Project -	3.000% 2.000 - 5.000% 1.888 - 2.505% 4.500% 5.000% 4.200 - 5.450% 2.375 - 5.000% 2.000 - 5.000% ark Bonds/4.094% Fixed Rate Bonds 4.250 - 5.920% 2.000 - 5.000%	2019-2021 2019-2021 2037 2034-2037 2017-2028 2019-2037 2019-2033 2019-2039	65,970,000 7,025,000 100,000 29,370,000 24,085,000 91,330,000 79,500,000 57,895,000 450,215,000	1,675,0 41,330,0 2,475,0 2,730,0 5,205,0

<sup>(1)</sup> Current month interest rate excluding variable debt fees.

<sup>(2)</sup> Weighted Average Cost of debt is net of BABs subsidy, original issue premiums/discounts and exlcudes variable debt liquidity/remarketing fees and interest rate swap payments.

	Electric System	Power Park Issue Three
Remaining New Money Authorization	\$ 465,160,992	\$ 103,865,000
<ul> <li>Remaining Senior Refunding Authorization</li> </ul>	\$ 1,220,932,381	\$ 250,810,000
<ul> <li>Remaining Subordinated Refunding Authorization</li> </ul>	\$ 820,643,000	n/a

JEA Water and Sewer System Principal Amount of Debt Outstanding and Average Interest Rates March 2017

Jesus/Average Coupen Pets	Interest Rates	Principal Payment Dates	Par Amount Principal Outstanding	Current Portion of Long-Term Debt
Issue/Average Coupon Rate	Interest Rates	Payment Dates	Outstanding	Long-Term Debi
Fixed Rate Bonds				
2009 Series B	3.750 - 5.000%	2017-2019	\$ 25,565,000	\$ 7,270,000
2010 Series A	6.210 - 6.310%	2026-2044	83,115,000	-
2010 Series B	4.500 - 5.700%	2017-2025	15,570,000	1,730,000
2010 Series C	5.000%	2020	9,545,000	-
2010 Series D	4.000 - 5.000%	2017-2039	101,850,000	4,125,000
2010 Series E	4.000 - 5.000%	2021-2039	60,990,000	-
2010 Series F	3.200 - 5.887%	2017-2040	45,520,000	1,245,000
2012 Series A	3.000 - 5.000%	2017-2041	317,935,000	1,535,000
2012 Series B	2.000 - 5.000%	2017-2041	130,085,000	1,725,000
2013 Series A	4.000 - 5.000%	2017-2027	89,740,000	10,950,000
2013 Series B	1.882%	2017	3,830,000	3,830,000
2014 Series A	2.000 - 5.000%	2017-2040	284,595,000	4,420,000
Total Fixed Rate Senior Bonds			1,168,340,000	36,830,000
2010 Series A	5.000%	2017-2022	13,150,000	2,525,000
2010 Series B	3.000 - 5.000%	2020-2025	12,770,000	-
2012 Series A	3.000 - 4.000%	2021-2033	20,320,000	_
2012 Series B	3.250 - 5.000%	2030-2043	41,640,000	_
2013 Series A	2.125 - 5.000%	2017-2029	72,250,000	5,410,000
Total Fixed Rate Subordinated Bond	ls		160,130,000	7,935,000
Total Fixed Rate Bonds/4.622%			1,328,470,000	44,765,000
Variable Rate Bonds	Current Interest Rates (1)		· · · · · ·	· · ·
2006 Series B - CPI Bonds	1.803% (2)	2017-2022	34,625,000	4,255,000
2008 Series A-2	0.689%	2028-2042	51,820,000	-
2008 Series B	0.727%	2023-2041	85,290,000	-
Total Variable Rate Senior Bonds			171,735,000	4,255,000
2008 Series A-1	0.655%	2017-2038	52,950,000	2,000,000
2008 Series A-2	0.691%	2030-2038	25,600,000	-
2008 Series B-1	0.755%	2030-2036	30,885,000	-
Total Variable Rate Subordinated Bo	onds		109,435,000	2,000,000
Total Variable Rate Bonds			281,170,000	6,255,000
Other Obligations				
Revolving Credit Agreement	1.837%	2018	3,000,000	-
Total Other Obligations			3,000,000	-
Weighted Average Cost(3) / To	tal Outstanding Debt	3.678%	\$ 1,612,640,000	\$ 51,020,000

<sup>(1)</sup> Current month interest rate excluding variable debt fees.

Remaining New Money Authorization
 Remaining Refunding Authorization
 \$ 218,078,023
 \$ 1,231,973,942

JEA
District Energy System
Principal Amount of Debt Outstanding and Average Interest Rates
March 2017

Issue/Average Coupon	Interest Rates	Principal Payment Dates	-	Par Amount Principal Outstanding	Current Portion of Long-Term Debt		
Fixed Rate Bonds							
2013 Series A/4.036%	1.425 - 4.538%	2017-2034	\$	38,125,000	\$	1,640,000	
Weighted Average Cost(1) / Total C	Outstanding Debt	4.092%	\$	38,125,000	\$	1,640,000	

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

• Remaining New Money Authorization

54,321,245

Remaining Refunding Authorization

106,670,000

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

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

## JEA INVESTMENT PORTFOLIO REPORT March 2017 All Funds

	INVESTMENT	В	OOK VALUE	YIELD	% OF TOTAL	LAST MONTH	6 MONTH AVERAGE
*	Treasuries	\$	16,296,298	0.70%	1.11%	1.14%	1.07%
	Agencies						
	Federal Farm Credit Bank		178,288,150	1.11%	12.16%	14.23%	13.89%
	Federal Home Loan Bank		424,377,600	1.13%	28.94%	27.07%	25.39%
	Total		602,665,750	1.13%	41.09%	41.31%	39.28%
	Municipal Bonds		300,532,744	2.03%	20.49%	19.73%	19.12%
	Commercial Paper		241,440,828	1.09%	16.46%	22.04%	20.84%
	U.S. Treasury Money Market Funds (1)		73,157,200	0.59%	4.99%	1.26%	3.46%
	Agency Money Market Funds (2)		43,625,000	0.61%	2.97%	2.98%	5.64%
	PFM Money Market Fund		70,000,000	0.99%	4.77%	4.88%	3.99%
	Wells Fargo Bank Accounts (3)						
	Electric, Scherer		60,281,616	0.40%	4.11%	2.06%	3.07%
	SJRPP		23,671,608	0.40%	1.61%	2.19%	1.54%
	Water & Sewer, DES		34,916,980	0.40%	2.38%	2.42%	2.01%
	Total Portfolio	\$1	,466,588,023	1.23%	100.00%	100.00%	100.00%

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

Weighted Avg. Annual Yield for March 2017, Excluding Bank & Money Market Funds: 1.35%

Weighted Avg. Annual Yield for March 2017, Including Bank & Money Market Funds: 1.23%

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

- (1) Morgan Stanley Treasury Fund; Fidelity Treasury Fund; Federated Treasury Fund
- (2) Morgan Stanley Government Fund; Wells Fargo Government Fund
- (3) Month-end bank balances

#### JEA Interest Rate Swap Position Report March 2017

#### JEA Debt Management Swaps Variable to Fixed

		Effective	Termination	Electric System	Water/Sewer	Fixed	Floating		Rate	
ID	Dealer	Date	Date	Allocation	Allocation	Rate	Rate (1)	Spread	Сар	Index
1	Goldman Sachs	9/18/2003	9/18/2033	\$ 84,800,000	\$ -	3.717	0.533	3.184	n/a	68% 1 mth Libor
3	Morgan Stanley	1/27/2005	10/1/2039	82,575,000	-	4.351	0.698	3.653	n/a	SIFMA
4	JPMorgan	1/27/2005	10/1/2035	86,000,000	-	3.661	0.533	3.128	n/a	68% 1 mth Libor
6	JPMorgan	1/27/2005	10/1/2037	39,175,000	-	3.716	0.533	3.183	n/a	68% 1 mth Libor
7	Morgan Stanley	10/31/2006	10/1/2022	-	34,625,000	4.012	1.803	2.209	n/a	CPI
8	Morgan Stanley	1/31/2007	10/1/2031	62,980,000	-	3.907	0.698	3.209	n/a	SIFMA
9	Merrill Lynch	3/8/2007	10/1/2041	-	85,290,000	3.895	0.698	3.197	n/a	SIFMA
10	Goldman Sachs	1/31/2008	10/1/2036	51,680,000	-	3.836	0.698	3.138	n/a	SIFMA
			Total	\$407,210,000	\$ 119,915,000	Wtd Avg	g Spread	3.185		

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

JEA Electric System Operating Statistics

			nth				o-Date	
		2017	arch	2016	Variance	2017	rch 2016	Variance
Electric revenues sales (000's omitted):								
Residential	\$	41,697	\$	41,266	1.04% \$	248,677	\$ 252,509	-1.52%
Commercial	·	30,647	,	28,613	7.11%	179,625	177,285	1.32%
Industrial		15,975		14,751	8.30%	91,698	90,400	1.44%
Public street lighting		1,102		1,145	-3.76%	6,609	6,670	-0.91%
Sales for resale - territorial		1,475		1,892	-22.04%	9,193	12,205	-24.68%
Electric revenues - territorial		90,896		87,667	3.68%	535,802	539,069	-0.61%
Sales for resale - off system		545		37	1372.97%	2,383	459	419.17%
Electric revenues		91,441		87,704	4.26%	538,185	539,528	-0.25%
Less: rate stabilization & recovery		2,822		(577)	-589.08%	26,733	(1,848)	-1546.59%
Less: allowance for doubtful accounts		· -		(150)	-100.00%	-	(883)	-100.00%
Net electric revenues		94,263		86,977	8.38%	564,918	536,797	5.24%
MWh sales								
Residential		360,957		367,691	-1.83%	2,151,059	2,291,964	-6.15%
Commercial		315,810		295,230	6.97%	1,818,062	1,863,022	-2.41%
Industrial		217,924		200,913	8.47%	1,234,894	1,292,102	-4.439
Public street lighting		5,955		6,916	-13.90%	34,914	40,960	-14.76%
Sales for resale - territorial		13,596		23,204	-41.41%	87,144	149,542	-41.73%
Total MWh sales - territorial		914,242		893,954	2.27%	5,326,073	5,637,590	-5.53%
Sales for resale - off system		18,115		1,914	846.45%	74,869	17,280	333.27%
Total MWH sales		932,357		895,868	4.07%	5,400,942	5,654,870	-4.49%
Number of accounts (1)								
Residential		402,930		396,463	1.63%	401,481	394,786	1.70%
Commercial		51,916		51,212	1.37%	51,749	51,084	1.30%
Industrial		204		201	1.49%	204	203	0.49%
Public street lighting		3,715		3,645	1.92%	3,707	3,626	2.23%
Sales for resale		2		2	0.00%	2	2	0.00%
Total average accounts		458,767		451,523	1.60%	457,143	449,701	1.65%
Residential averages								
Revenue per account - \$		103.48		104.09	-0.59%	619.40	639.61	-3.16%
kWh per account		896		927	-3.34%	5,358	5,806	-7.72%
Revenue per kWh - ¢		11.55		11.22	2.94%	11.56	11.02	4.90%
Degree days								
Heating degree days		158		74	84	761	922	(161
Cooling degree days		79		118	(39)	480	645	(165
Total degree days		237		192	45	1,241	1,567	(326
Degree days - 30 year average			210				1,651	

<sup>(1)</sup> The year-to-date column represents a fiscal year-to-date average.

JEA Water and Sewer System Operating Statistics

		nth				o-Date	
	Ma 2017	irch	2016	Variance	Ma 2017	rch 2016	Variance
Water	2017		2016	variance	2017	2016	variance
Revenues (000's omitted):							
Residential	\$ 7,690	\$	7,139	7.72% \$	44,501	\$ 42,121	5.65%
Commercial and industrial	3,884		3,761	3.27%	22,875	22,728	0.65%
Irrigation	2,957		2,535	16.65%	16,735	13,971	19.78%
Total water revenues	14,531		13,435	8.16%	84,111	78,820	6.71%
Less: rate stabilization environmental Less: allowance for doubtful accounts	(1,168)		(1,055)	10.71%	(6,833)	(6,240)	9.50% -99.22%
Net water revenues	\$ 13,362	\$	(21) 12,359	-95.24% 8.12% \$	(1) 77,277	(128) \$ 72,452	6.66%
Karlania (000 prittad)							
Kgal sales (000s omitted) Residential	1,519,112		1,346,095	12.85%	8,349,207	7,723,783	8.10%
Commercial and industrial	1,134,090		1,060,694	6.92%	6,516,202	6,479,401	0.57%
Irrigation	515,015		418,886	22.95%	2,814,658	2,147,560	31.06%
Total kgals sales	3,168,217		2,825,675	12.12%	17,680,067	16,350,744	8.13%
Number of accounts (1):							
Residential	278,565		271,860	2.47%	277,021	270,307	2.48%
Commercial and industrial	25,405		24,594	3.30%	25,347	24,366	4.03%
Irrigation	36,657		36,148	1.41%	36,574	36,145	1.19%
Total average accounts	340,627		332,602	2.41%	338,942	330,818	2.46%
Residential averages:							
Revenue per account - \$	27.61		26.26	5.14%	160.64	155.83	3.09%
Kgals per account	5.45		4.95	10.10%	30.14	28.57	5.50%
Revenue per kgals - \$	5.06		5.30	-4.53%	5.33	5.45	-2.20%
Sewer							
Revenues (000's omitted):							
Residential	\$ 11,844	\$	10,944	8.22% \$	67,690		5.93%
Commercial and industrial	8,872		8,601	3.15%	51,911	51,771	0.27%
Total sewer revenues	20,716		19,545	5.99%	119,601	115,672	3.40%
Less: rate stabilization environmental Less: allowance for doubtful accounts	2,811		5,807 (32)	-51.59% -100.00%	6,475 (1)	2,136 (193)	203.14% -99.48%
Net sewer revenues	23,527		25,320	-7.08%	126,075	117,615	7.19%
Kaal aalaa (000a amittad)							
Kgal sales (000s omitted) Residential	1,303,418		1,145,757	13.76%	7,218,609	6,628,302	8.91%
Commercial and industrial	972,617		932,797	4.27%	5,666,524	5,627,586	0.69%
Total kgals sales	2,276,035		2,078,554	9.50%	12,885,133	12,255,888	5.13%
Number of accounts (1):							
Residential	245,931		239,440	2.71%	244.442	237,970	2.72%
Commercial and industrial	18,128		17,970	0.88%	18,105	17,916	1.05%
Total average accounts	264,059		257,410	2.58%	262,547	255,886	2.60%
Residential averages:							
Revenue per account - \$	48.16		45.71	5.36%	276.92	268.53	3.12%
kgals per account	5.30		4.79	10.65%	29.53	27.85	6.03%
Revenue per kgals - \$	9.09		9.55	-4.82%	9.38	9.64	-2.70%
Reuse							
Revenues (000's omitted):							
Reuse revenues	\$ 1,107	\$	776	42.65% \$	5,800	\$ 3,813	52.11%
Kgal sales (000s omitted)							
Kgal sales (000s omitted)	299,972		180,143	66.52%	1,560,580	997,496	56.45%
Number of accounts (1):							
Reuse accounts	9,305		7,421	25.39%	8,904	7,038	26.51%
Rainfall				Diff in inches			Diff in inches
Normal	3.95		3.95		19.28	19.28	
Actual	1.07		1.83	(0.76)	18.29	14.16	4.13

<sup>(1)</sup> The year-to-date column represents a fiscal year-to-date average.

JEA
Electric System
Production Statistic

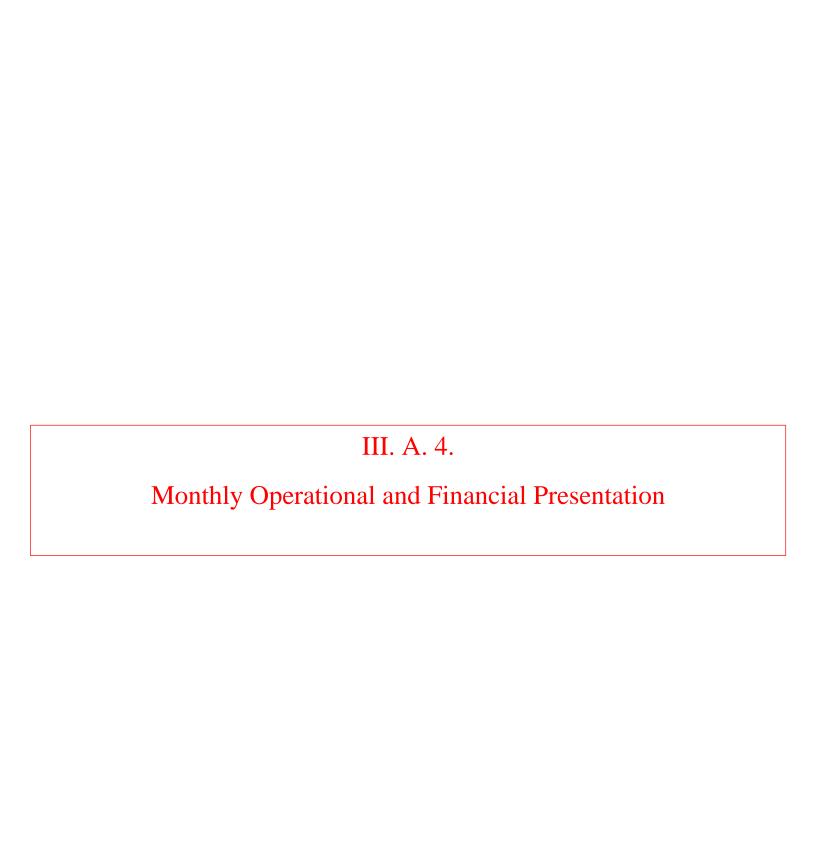
Barrels #6 oil consumed   20			Mo					Year-1			
Seam:   Fuel expense				rcn		Variance			ircn		Variance
	enerated power:										
Fuel expense	team:										
Barnels #6 oil consumed   20											
Special parter Consumed   108_0   107.96   0.22%   \$13.53   \$1.06   104.008   \$76.100   \$76.10	•	\$		\$			\$	,	\$	2,722,252	-96.29%
With olg generated (1)	Barrels #6 oil consumed							747		25,588	-97.08%
Cost per MWh - cil	\$/ per barrel consumed		108.20	\$	107.96	0.22%	\$	135.36	\$	106.39	27.23%
Natural gas units #1-3	κWh oil generated (1)		-		104,008			376,100		14,404,324	-97.39%
Gas expense - variable (MBTU's consumed (MBTU's consumed (S. 1,835,1516)         \$ 1,335,1516 (2.027,309)         9-4,84% (2,870,345)         \$ 1,535,1516 (2.027,309)         9-4,84% (2,870,345)         \$ 2,870,345 (6.615,5.66)         \$ 1,535,1516 (6.615,5.66)         \$ 2,577,572,350 (6.615,6.615,5.66)         \$ 2,577,572,350 (6.615,6	Cost per MWh - oil						\$	268.84	\$	188.99	42.25%
MMBTU's consumed	latural gas units #1-3										
SpenkMBTU consumed	Gas expense - variable	\$	5,503,042	\$	4,213,227	30.61%	\$	8,987,625	\$	15,564,467	-42.26%
kWh - gas generated (1)         170,319,462         204,199,442         1.65,99%         252,757,236         628,946, 24           Cost per MWh - gas & oil - steam         \$ 32,31         \$ 20,63         56,60%         \$ 35,50         \$ 24           Coal Cost per MWh - gas & oil - steam         \$ 23,32         \$ 20,55         57,29%         \$ 35,90         \$ 28           Coal Syense         \$ 78,156         \$ 2,699,130         \$ 7,157,055         \$ 11,461,0         \$ 28,646,454         \$ 228,766,565         \$ 2,909,130         \$ 248,646,454         \$ 26,665,914         \$ 228,766,45,454         \$ 228,766,565	MMBTU's consumed		1,835,151		2,027,309	-9.48%		2,870,342		6,615,545	-56.61%
Cost per MWh - gas & oil - steam \$ 32.31 \$ 20.63 \$ 56.60% \$ 35.50 \$ 24.24 \$ 20.55 \$ 77.29% \$ 35.90 \$ 28. \$ 20.55 \$ 77.29% \$ 35.90 \$ 28. \$ 20.50 \$ 77.20% \$ 35.90 \$ 28. \$ 20.50 \$ 77.20% \$ 24.20%	\$/ per MMBTU consumed	\$	3.00	\$	2.08	44.29%	\$	3.13	\$	2.35	33.09%
Cost per MWh- gas & oil - steam         \$ 32.31         \$ 20.63         56.60%         \$ 35.56         \$ 24           Cost per MWh- gas & oil - steam         \$ 32.32         \$ 20.55         57.29%         \$ 35.50         \$ 28           Coal         Coal expense         \$ 78.156         \$ 2,699,130         \$ 21,157.055         \$ 11,461,0         \$ 1,461,0         \$ 248,464,544         \$ 506,591,2         \$ 1,461,0         \$ 248,464,544         \$ 506,591,2         \$ 1,461,0         \$ 220,223,418         \$ 28,78         \$ 22,224,248         \$ 20,223,418         \$ 28,78         \$ 22,224,223,418         \$ 36,420,00         \$ 435,542,006         8 94,270,20         \$ 435,542,006         8 94,270,20         \$ 19,705,0         \$ 476,482         \$ 19,705,0         \$ 22,222,2418         \$ 36,420,00         \$ 19,705,0         \$ 22,222,23,418         \$ 14,450,211         \$ 19,705,0         \$ 22,222,23,418         \$ 14,450,211         \$ 19,705,0         \$ 22,222,23,418         \$ 14,450,211         \$ 19,705,0         \$ 22,222,23,418         \$ 14,450,211         \$ 19,705,0         \$ 22,222,23,418         \$ 31,44         \$ 22,22         \$ 22,22         \$ 22,22         \$ 22,22         \$ 22,22         \$ 22,22         \$ 22,22         \$ 22,22         \$ 22,22         \$ 22,22         \$ 22,22         \$ 22,22         \$ 22,22         \$ 22,22         \$ 22,22			170,319,462		204,199,442	-16.59%		252,757,236		628,946,776	-59.81%
Coal coal promise		\$	32.31	\$	20.63	56.60%	\$	35.56	\$	24.75	43.69%
Coat per MWh - coal   Sample	Cost per MWh - gas & oil - steam	\$	32.32	\$	20.55	57.29%	\$	35.90	\$	28.42	26.32%
Coal expense         \$ 78,156         \$ 2,899,130         \$ 7,157,055         \$ 248,645,454         506,5918           Cost per MWh - coal         \$ 489,68         \$ 21.18         \$ 248,645,454         506,5918           Per Cocke and limestone         \$ 22,022,234.18         \$ 22,022,234.18         \$ 14,450,211         \$ 19,705,0           Expense         \$ 38,027         \$ 4,122,889         \$ 14,450,211         \$ 19,705,0           KWh generated         (2,145,089)         220,223,418         438,542,606         884,2702           Cost per MWh - pet coke and limestone         (7,773)         \$ 18,72         \$ 31,44         \$ 22,022,23,418           Cost per MWh - coal & petcoke - steam         (58,72)         \$ 19,62         \$ 31,44         \$ 22,022,243           Cost per MWh - coal & petcoke - steam         (58,72)         \$ 19,62         \$ 476,482         \$ 228,0           Cost per MWh - coal & petcoke - steam         \$ 170,472         \$ 68,020         150,62%         \$ 476,482         \$ 286,0           Barrels #2 oil consumed         \$ 1,955         570         242,98%         4,215         1,4           KWh - oil generated         \$ 757,234         32,595         2223,16%         3,470,2         286,0           KWh - oil generated         \$ 143,081         \$ 37											
KWh generated		_		_			_		_		
Cost per MWh - coal   \$469.68   \$21.18   \$28.78   \$22   Per tocke and limestone   \$38.027   \$4.122.889   \$1.4450.211   \$19.705.06		\$		\$			\$		\$	11,461,066	-37.55%
Pet coke and limestone   Suppose   \$ 38,027 \$ 4,122,889 \$ 14,450,211 \$ 19,705,0										506,591,930	-50.92%
Expense   \$ 38,027   \$ 4,122,889   \$ 14,450,211   \$ 19,705,05	Cost per MWh - coal	\$	469.68	\$	21.18		\$	28.78	\$	22.62	27.23%
KWh generated Cost per MWh - pet coke and limestone         (2,145,089)         220,223,418         438,542,606         894,270,2           Cost per MWh - coal & petcoke - steam         (58,72)         19,62         \$ 31,44         \$ 22           Combustion turbine:         Fuel oil           Fuel syense         \$ 170,472         \$ 68,020         150,62%         \$ 476,482         \$ 286,02           Barrels #2 oil consumed         1,955         570         242,89%         4,215         1,4           Ky per barrel consumed         8,720         \$ 119,33         26,39%         \$ 113,04         196           KWh - oil generated         572,24         32,595         2223,16%         1,374,329         281,7           Cost per MWh - oil         \$ 225,12         \$ 2,086,82         289,21%         \$ 346,70         \$ 1,015           Matural gas (includes landfill)         \$ 143,081         \$ 37,204         284,58%         \$ 536,599         \$ 416,6           Gas expense Kennedy & landfill - variable         47,536         17,889         165,73%         165,633         175,2           Who - gas generated (1)         3,965,910         1,158,499         242,33%         12,425,524         2,25,209           Cost per MWh - gas         3,30,80         30,11											
Cost per MWh - pet coke and limestone \$ (17.73) \$ 18.72 \$ 32.95 \$ 22  Cost per MWh - coal & petcoke - steam \$ (58.72) \$ 19.62 \$ 31.44 \$ 22.  Combustion turbine:  Fuel oil Fuel expense \$ 170,472 \$ 68,020 \$ 150,62% \$ 476,482 \$ 286,02 \$ 19.6	•	\$		\$			\$		\$	19,705,033	-26.67%
Cost per MWh - coal & petcoke - steam \$ (58.72) \$ 19.62 \$ \$ 31.44 \$ 22.  Combustion turbine:  Fuel coll  Fuel expense \$ 170,472 \$ 68,020 150.62% \$ 476,482 \$ 286,0.00 150.62% \$ 476,482 \$ 286,0.00 150.62% \$ 476,482 \$ 286,0.00 150.62% \$ 476,482 \$ 286,0.00 150.62% \$ 476,482 \$ 286,0.00 150.62% \$ 476,482 \$ 286,0.00 150.62% \$ 476,482 \$ 286,0.00 150.62% \$ 476,482 \$ 286,0.00 150.62% \$ 476,842 \$ 286,0.00 150.62% \$ 476,842 \$ 286,0.00 150.62% \$ 476,482 \$ 286,0.00 150.62% \$ 476,482 \$ 286,0.00 150.62% \$ 476,482 \$ 286,0.00 150.62% \$ 476,842 \$ 286,0.00 150.62% \$ 44,215 \$ 1,4.00 \$ 24,2.98% \$ 113,0.4 \$ 196,0.00 \$ 24,2.98% \$ 113,0.4 \$ 196,0.00 \$ 22,0.00 \$ 2	kWh generated		(2,145,089)		220,223,418			438,542,606		894,270,201	-50.96%
Properties   Pro	Cost per MWh - pet coke and limestone	\$	(17.73)	\$	18.72		\$	32.95	\$	22.03	49.54%
Fuel expense \$ 170,472 \$ 68,020 \$ 150,62% \$ 476,482 \$ 286,020 \$ 150,62% \$ 476,482 \$ 286,020 \$ 150,62% \$ 476,482 \$ 286,020 \$ 150,62% \$ 4,215 \$ 1,48 \$ 196 \$ 19,955 \$ 570 \$ 242,98% \$ 4,215 \$ 1,48 \$ 196 \$ 19,955 \$ 570 \$ 242,98% \$ 4,215 \$ 1,48 \$ 196 \$ 19,955 \$ 222,18% \$ 13,04 \$ 196 \$ 196 \$ 19,000 \$ 13,000 \$ 11,015 \$ 196 \$ 19,000 \$ 11,015 \$ 196 \$ 19,000 \$ 11,015 \$ 196 \$ 19,000 \$ 11,015 \$ 196 \$ 19,000 \$ 10,015 \$ 10,015 \$ 10,015 \$ 10,000 \$	Cost per MWh - coal & petcoke - steam	\$	(58.72)	\$	19.62		\$	31.44	\$	22.25	41.33%
Fuel expense	combustion turbine:										
Barrels #2 oil consumed											
Barrels #2 oil consumed	Fuel expense	\$	170.472	\$	68.020	150.62%	\$	476,482	\$	286,043	66.58%
Styler barrel consumed   \$87.20   \$119.33   -26.93%   \$113.04   \$166   \$KWh - oil generated   \$757,234   \$32,595   \$223.16%   \$1,374,329   \$281,7   \$Cost per MWh - oil   \$225.12   \$2,086.82   -89.21%   \$346.70   \$1,015   \$1,01		*		*	,		-		*	1,458	189.09%
KWh - oil generated   757,234   32,595   2223,16%   1,374,329   281,7		\$		\$			\$		\$	196.19	-42.38%
Cost per MWh - oil   \$ 225.12   \$ 2,086.82   -89.21%   \$ 346.70   \$ 1,015.		Ψ		Ψ			Ψ		Ψ		387.77%
Natural gas (includes landfill) Gas expense (Kennedy & landfill - variable MMBTU's consumed 47,536 17,889 165,739 165,633 175,2   KWh - gas generated (1) 3,965,910 1,158,499 242,33% 12,425,524 13,250,3   Cost per MWh - gas \$ 36.08 \$ 32.11 12,349 \$ 43.19 \$ 31.   Gas expense BB simple - variable \$ 33,962 \$ 19,062 78,179 \$ 810,560 \$ 749,5   MMBTU's consumed \$ 11,846 12,268 -3,44% 252,509 355,2   KWh - gas generated (1) 914,488 917,801 -0.369 21,630,585 31,175,4   Gas expense BB combined - variable \$ 37,14 \$ 20,77 78,819 \$ 37,47 \$ 24.   Gas expense BB combined - variable \$ 7,250,646 \$ (8,407) \$ 47,095,207 \$ 25,743,0   MMBTU's consumed \$ 2,608,660 2,686 14,676,960 11,112,9   KWh - gas generated (1) 373,188,502 \$ (867,72) \$ 2,119,612,254 1,622,656,0   Cost per MWh - gas combined - variable \$ 1,943 \$ 9,69 \$ 2,212 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$ 2,212 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$ 2,222 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$ 2,222 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$ 2,222 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$ 2,222 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$ 2,222 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$ 2,222 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$ 2,222 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$ 2,222 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$ 2,222 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$ 2,222 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$ 2,222 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$ 2,222 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$ 2,222 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$ 2,222 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$ 2,222 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$ 2,222 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$ 2,222 \$ 15.   Gas expense GEC simple - variable \$ 1,943 \$ 9,69 \$		\$		\$			\$		\$	1,015.20	-65.85%
Gas expense Kennedy & landfill - variable MMBTU's consumed 47,536 17,889 165.73% 165.633 175.2   Kyper MMBTU consumed 3.0.1 2.08 44.73% 3.24 2.2   KWh - gas generated (1) 3,965,910 1,158,499 242.33% 12,425,524 13,250,3   Cost per MWh - gas \$36.08 \$32.11 12.34% \$43.19 \$31.   Gas expense BB simple - variable \$33,962 \$19,062 78.17% \$810,560 \$749,5   MMBTU's consumed \$11,846 12,268 -3.44% 252,509 355,2   Kyper MMBTU consumed \$2.87 \$1.55 84.51% \$3.21 \$2.   KWh - gas generated (1) 914,488 917,801 -0.36% 21,630,585 31,175,4   Cost per MWh - gas simple \$7,250,646 \$(8,407) \$47,095,207 \$25,743,0   MMBTU's consumed \$2.608,660 2,686 14,676,960 11,112,8   Kyper MMBTU consumed \$2,008,660 2,686 14,676,960 11,112,8   Kyper MMBTU consumed \$2,008,660 2,686 2,686 14,677,92 2,119,612,254 1,622,656,0   Cost per MWh - gas combined \$1,008,660 2,686 2,	·				·					,	
MMBTU's consumed         47,536         17,889         165,73%         165,633         175,2           \$/ per MMBTU consumed         \$ 3.01         \$ 2.08         44,73%         \$ 3.24         \$ 2.52           kWh - gas generated (1)         3,965,910         1,158,499         242,33%         12,425,524         13,250,3           Cost per MWh - gas         \$ 36.08         \$ 32.11         12.34%         \$ 43.19         \$ 31.           Gas expense BB simple - variable         \$ 33,962         \$ 19,062         78.17%         \$ 810,560         \$ 749,5           MMBTU's consumed         \$ 11,846         12,268         -3,44%         252,509         355,2           KWh - gas generated (1)         914,488         917,801         -0.36%         21,630,585         31,175,4           Cost per MWh - gas simple         \$ 37.14         \$ 20.77         78.81%         \$ 37.47         \$ 24           Gas expense BB combined - variable         \$ 7,250,646         \$ (8,407)         \$ 47,095,207         \$ 25,743,0           MMBTU's consumed         \$ 2,78         \$ (3,13)         \$ 3,21         \$ 22           KWh - gas generated (1)         373,188,502         (867,792)         \$ 2,119,612,254         1,622,656,0           Cost per MWh - gas combined         \$	latural gas (includes landfill)										
\$\ \text{per MMBTU consumed} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Gas expense Kennedy & landfill - variable	\$	143,081	\$	37,204	284.58%	\$	536,599	\$	416,613	28.80%
kWh - gas generated (1)         3,965,910         1,158,499         242.33%         12,425,524         13,250,3           Cost per MWh - gas         \$ 36.08         \$ 32.11         12.34%         \$ 43.19         \$ 31.           Gas expense BB simple - variable         \$ 33,962         \$ 19,062         78.17%         \$ 810,560         \$ 749,5           MMBTU consumed         \$ 11,846         12,268         -3,44%         252,509         355,2           KWh - gas generated (1)         914,488         917,801         -0.36%         21,630,585         31,175,4           Cost per MWh - gas simple         \$ 37.14         \$ 20.77         78.81%         \$ 37.47         \$ 24           Gas expense BB combined - variable         \$ 7,250,646         \$ (8,407)         \$ 47,095,207         \$ 25,743,0           MMBTU's consumed         \$ 2,608,660         2,686         14,676,960         11,112,9           KWh - gas generated (1)         373,188,502         (867,792)         2,119,612,254         1,622,656,0           Cost per MWh - gas combined         \$ 19.43         \$ 9.69         \$ 729,231         \$ 970,7           MMBTU's consumed         \$ -         \$ -         \$ 729,231         \$ 970,7           MMBTU's consumed         \$ -         \$ -         \$ 2.	MMBTU's consumed		47,536		17,889	165.73%		165,633		175,260	-5.49%
Cost per MWh - gas \$ 36.08 \$ 32.11 12.34% \$ 43.19 \$ 31.  Gas expense BB simple - variable \$ 33,962 \$ 19,062 78.17% \$ 810,560 \$ 749,5  MMBTU's consumed \$ 11,846 12,268 -3.44% 252,509 355,2  \$\( \frac{5}{2}\) per MMBTU consumed \$ 2.87 \$ 1.55 84,51% \$ 3.21 \$ 2.  \$\( \frac{5}{2}\) per MMBTU consumed \$ 37.14 \$ 20.77 78.81% \$ 37.47 \$ 24.  Gas expense BB combined - variable \$ 7,250,646 \$ (8,407) \$ 47,095,207 \$ 25,743,0  MMBTU's consumed \$ 2,608,660 \$ 2,686 \$ 14,676,960 \$ 11,112,9  \$\( \frac{5}{2}\) per MMBTU consumed \$ 2,78 \$ (3.13) \$ 3.21 \$ 2.  \$\( \frac{5}{2}\) per MMBTU consumed \$ 2,78 \$ (3.13) \$ 3.21 \$ 2.  \$\( \frac{5}{2}\) per MMBTU consumed \$ 37,188,502 \$ (867,792) \$ 2,119,612,254 \$ 1,622,656,0  \end{cases pense GEC simple - variable \$ - \$ - \$ 729,231 \$ 970,7  \$\( \frac{5}{2}\) per MMBTU consumed \$ 3,148,502 \$ (867,792) \$ 2,119,612,254 \$ 1,622,656,0  \end{cases pense GEC simple - variable \$ - \$ - \$ 729,231 \$ 970,7  \$\( \frac{5}{2}\) per MMBTU consumed \$ 724,051 \$ (539,246) \$ 25,200,117 \$ 35,533,6  \end{cases pense generated \$ 3,073,104 \$ 2,350,454 \$ 30.75% \$ 18,138,499 \$ 15,254,55  **Total generated power:**  Fuels expense \$ \frac{5}{2}\) \frac{5}{2} \frac{5}{2}\) \frac{5}{2} \frac{5}{2}\) \frac{5}{2} \frac{5}{2}\) \frac{5}{2} \frac{5}{2}\) \frac{5}{2} \frac{5}{2}\) \frac{5}{2} \frac{5}{2} \frac{5}{2}\) \frac{5}{2} \frac{5}{2} \frac{5}{2}\) \frac{5}{2} \frac{5}{2} \frac{5}{2}\]  **Total generated power:**  Fuels expense \$ \frac{5}{2} \frac	\$/ per MMBTU consumed	\$	3.01	\$	2.08	44.73%	\$	3.24	\$	2.38	36.29%
Gas expense BB simple - variable \$ 33,962 \$ 19,062 78.17% \$ 810,560 \$ 749,5	kWh - gas generated (1)		3,965,910		1,158,499	242.33%		12,425,524		13,250,301	-6.22%
MMBTÜ's consumed         \$ 11,846         12,268         -3.44%         252,509         355,2           \$/per MMBTÜ consumed         \$ 2.87         \$ 1.55         84,51%         \$ 3.21         \$ 2.           kWh - gas generated (1)         914,488         917,801         -0.36%         21,630,585         31,175,4           Cost per MWh - gas simple         \$ 37.14         \$ 20.77         78.81%         \$ 37.47         \$ 24.           Gas expense BB combined - variable         \$ 7,250,646         \$ (8,407)         \$ 47,095,207         \$ 25,743,0           MMBTÜ's consumed         2,608,660         2,686         14,676,960         11,112,9           \$/per MMBTU consumed         \$ 2.78         \$ (3.13)         \$ 3.21         \$ 2.           \$/per MMBTU consumed         \$ 2.78         \$ (3.13)         \$ 3.21         \$ 2.           \$/per MWh - gas combined         \$ 19.43         \$ 9.69         \$ 22.22         \$ 15.           Gas expense GEC simple - variable         \$ - \$ - \$ \$ 72,9231         \$ 970,7           MMBTÜ's consumed         \$ 2.53         \$ 2.53         \$ 2.53         \$ 2.           \$/per MMBTU consumed         \$ 2.52         \$ 2.53         \$ 2.         \$ 2.53         \$ 2.           \$/per MMBTU consumed         \$ 2.5	Cost per MWh - gas	\$	36.08	\$	32.11	12.34%	\$	43.19	\$	31.44	37.35%
MMBTÜ's consumed         \$ 11,846         12,268         -3.44%         252,509         355,2           \$/per MMBTÜ consumed         \$ 2.87         \$ 1.55         84,51%         \$ 3.21         \$ 2.           kWh - gas generated (1)         914,488         917,801         -0.36%         21,630,585         31,175,4           Cost per MWh - gas simple         \$ 37.14         \$ 20.77         78.81%         \$ 37.47         \$ 24.           Gas expense BB combined - variable         \$ 7,250,646         \$ (8,407)         \$ 47,095,207         \$ 25,743,0           MMBTU's consumed         2,608,660         2,686         14,676,960         11,112,9           \$/per MMBTU consumed         \$ 2.78         (3.13)         \$ 3.21         \$ 2.           kWh - gas generated (1)         373,188,502         (867,792)         2,119,612,254         1,622,656,0           Cost per MWh - gas combined         \$ 19,43         \$ 9.69         \$ 22.22         \$ 15.           Gas expense GEC simple - variable         \$ -         \$ -         \$ 729,231         \$ 970,7           MMBTU's consumed         \$ -         \$ -         \$ 25,33         421,2           KWh - gas generated         724,051         (539,246)         25,200,117         35,33,6           Cos	Gas expense BB simple - variable	\$	33 962	\$	19.062	78 17%	\$	810 560	\$	749,549	8.14%
\$\ \text{per MMBTU consumed} \ \ \ 2.87 \ \ 1.55 \ 84.51\% \ \ 3.21 \ \ 2.87 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				Ψ	,		Ψ	,	•	355,250	-28.92%
kWh - gas generated (1)         914,488         917,801         -0.36%         21,630,585         31,175,4           Cost per MWh - gas simple         \$ 37.14         \$ 20.77         78.81%         \$ 37.47         \$ 24.           Gas expense BB combined - variable         \$ 7,250,646         \$ (8,407)         \$ 47,095,207         \$ 25,743,0           MMBTU's consumed         \$ 2,608,660         2,686         14,676,960         11,112,9           \$/ per MMBTU consumed         \$ 2.78         \$ (3.13)         \$ 3.21         \$ 2.           kWh - gas generated (1)         373,188,502         (867,792)         2,119,612,254         1,622,656,0           Cost per MWh - gas combined         \$ 19.43         \$ 9.69         \$ 22.22         \$ 15.           Gas expense GEC simple - variable         \$ - \$ - \$ \$ 729,231         \$ 970,7           MMBTU's consumed         \$ - \$ - \$ 729,231         \$ 970,7           MMBTU's consumed         \$ - \$ - \$ 729,231         \$ 970,7           MMBTU's consumed         \$ - \$ - \$ 729,231         \$ 970,7           MWh - gas generated         724,051         (539,246)         25,200,117         35,533,6           Cost per MWh - gas & oil ct         \$ 20.02         \$ 165.10         \$ 22.77         \$ 16.           Natural gas expense				\$			2		2	2.11	52.14%
Cost per MWh - gas simple \$ 37.14 \$ 20.77 78.81% \$ 37.47 \$ 24.  Gas expense BB combined - variable \$ 7,250,646 \$ (8,407) \$ 47,095,207 \$ 25,743,0		Ψ		Ψ			Ψ		Ψ		-30.62%
Gas expense BB combined - variable \$ 7,250,646 \$ (8,407) \$ 47,095,207 \$ 25,743,0   MMBTU's consumed \$ 2,608,660 \$ 2,686 \$ 14,676,960 \$ 11,112,9   \$ /per MMBTU consumed \$ 2.78 \$ (3,13) \$ 3.21 \$ 2,   kWh - gas generated (1) \$ 373,188,502 \$ (867,792) \$ 2,119,612,254 \$ 1,622,656,0   Cost per MWh - gas combined \$ 19.43 \$ 9.69 \$ 22.22 \$ 15.  Gas expense GEC simple - variable \$ - \$ - \$ 729,231 \$ 970,7   MMBTU's consumed \$ 2.53 \$ 2.   kWh - gas generated \$ 724,051 \$ (539,246) \$ 25,200,117 \$ 35,533,6   Cost per MWh - gas simple \$ - \$ - \$ 28.94 \$ 27.  Cost per MWh - gas simple \$ 20.02 \$ 165.10 \$ 22.77 \$ 16.  Natural gas expense - fixed \$ 3,073,104 \$ 2,350,454 \$ 30.75% \$ 18,138,499 \$ 15,254,5    Total generated power:  Fuels expense \$ 16,292,654 \$ 13,486,788 \$ 20.80% \$ 98,482,580 \$ 92,873,4   Cost per MWh - gas \$ 3,120,564,206 \$ 3,747,110,5   Cost per MWh - gas \$ 3,120,564,206 \$ 3,747,110,5   Cost per MWh - gas \$ 3,120,564,206 \$ 3,747,110,5   Cost per MWh - gas \$ 3,120,564,206 \$ 3,747,110,5   Cost per MWh - gas \$ 3,120,564,206 \$ 3,747,110,5   Cost per MWh - gas \$ 3,156 \$ 24.40 \$ 21.86% \$ 31.56 \$ 24.40 \$ 21.86% \$ 3.156 \$ 24.40 \$ 21.86% \$ 3.	. ,	\$		\$			\$		\$	24.04	55.86%
MMBTU's consumed         2,608,660         2,686         14,676,960         11,112,9           \$/per MMBTU consumed         \$ 2.78         \$ (3.13)         \$ 3.21         \$ 2.           kWh - gas generated (1)         373,188,502         (867,792)         2,119,612,254         1,622,656,0           Cost per MWh - gas combined         \$ 19.43         \$ 9.69         \$ 22.22         \$ 15           Gas expense GEC simple - variable         \$ -         \$ 729,231         \$ 970,7           MMBTU's consumed         -         \$ 288,337         421,2           \$/per MMBTU consumed         \$ 2.53         \$ 2.	2 Por 3	•		•			•		•		
\$/ per MMBTU consumed       \$ 2.78       \$ (3.13)       \$ 3.21       \$ 2.22         kWh - gas generated (1)       373,188,502       (867,792)       2,119,612,254       1,622,656,0         Cost per MWh - gas combined       \$ 19.43       \$ 9.69       \$ 22.22       \$ 15.         Gas expense GEC simple - variable       \$ -       \$ -       \$ 729,231       \$ 970,7         MMBTU's consumed       \$ -       \$ 288,337       421,2         \$/ per MMBTU consumed       \$ 2.53       \$ 2.         kWh - gas generated       724,051       (539,246)       25,200,117       35,533,6         Cost per MWh - gas simple       \$ -       \$ -       \$ 28.94       \$ 27.         Cost per MWh - gas & oil ct       \$ 20.02       \$ 165.10       \$ 22.77       \$ 16.         Natural gas expense - fixed       \$ 3,073,104       \$ 2,350,454       30.75%       \$ 18,138,499       \$ 15,254,5         Total generated power:         Fuels expense       \$ 16,292,654       \$ 13,486,788       20.80%       \$ 98,482,580       \$ 92,873,4         kWh generated       \$ 24,890,960       \$ 55,686,322       -0.87%       3,120,564,206       3,747,110,5         Cost per MWh       \$ 29.74       \$ 24.40       21.86%       \$ 31.56		\$		\$	. , ,		\$		\$	25,743,078	82.94%
kWh - gas generated (1)       373,188,502       (867,792)       2,119,612,254       1,622,656,0         Cost per MWh - gas combined       \$ 19.43       \$ 9.69       \$ 22.22       \$ 15.         Gas expense GEC simple - variable       - \$ -       \$ 729,231       \$ 970,7         MMBTU's consumed       - 288,337       421,2         \$/per MMBTU consumed       \$ 2.53       \$ 2.53         kWh - gas generated       724,051       (539,246)       25,200,117       35,533,6         Cost per MWh - gas simple       \$ -       \$ -       \$ 28.94       \$ 27.         Cost per MWh - gas & oil ct       \$ 20.02       \$ 165.10       \$ 22.77       \$ 16.         Natural gas expense - fixed       \$ 3,073,104       \$ 2,350,454       30.75%       \$ 18,138,499       \$ 15,254,5         Total generated power:         Fuels expense       \$ 16,292,654       \$ 13,486,788       20.80%       \$ 98,482,580       \$ 92,873,4         kWh generated       547,890,960       552,686,322       -0.87%       3,120,564,206       3,747,110,5         Cost per MWh       \$ 29.74       \$ 24.40       21.86%       \$ 31.56       \$ 24.24			2,608,660		2,686			14,676,960		11,112,953	32.07%
Cost per MWh - gas combined         \$ 19.43         \$ 9.69         \$ 22.22         \$ 15.           Gas expense GEC simple - variable MMBTU's consumed         \$ -         \$ 729,231         \$ 970,7           MMBTU's consumed         \$ 2.53         \$ 2.53         \$ 2.53         \$ 2.53         \$ 2.53         \$ 2.53         \$ 2.53         \$ 2.53         \$ 2.53         \$ 2.53         \$ 2.53         \$ 2.53         \$ 2.53         \$ 2.53         \$ 2.53         \$ 2.53         \$ 2.53         \$ 2.53         \$ 2.50	\$/ per MMBTU consumed	\$	2.78	\$	(3.13)		\$	3.21	\$	2.32	38.52%
Gas expense GEC simple - variable         - \$ - \$ - \$ 729,231 \$ 970,7 MMBTU's consumed         - \$ - \$ 288,337 \$ 421,2 \$ 288,337 \$ 421,2 \$ 288,337 \$ 421,2 \$ 288,337 \$ 421,2 \$ 288,337 \$ 421,2 \$ 288,337 \$ 421,2 \$ 288,337 \$ 421,2 \$ 288,4 \$ 27.0 \$ 288,337 \$ 22.0 \$ 288,337 \$ 22.0 \$ 288,337 \$ 22.0 \$ 288,337 \$ 22.0 \$ 288,337 \$ 288,94 \$ 27.0 \$ 288,94 \$ 27.0 \$ 288,94 \$ 27.0 \$ 288,94 \$ 27.0 \$ 288,94 \$ 27.0 \$ 288,94 \$ 27.0 \$ 288,94 \$ 27.0 \$ 288,94 \$ 27.0 \$ 288,94 \$ 27.0 \$ 288,94 \$ 27.0 \$ 288,94 \$ 27.0 \$ 288,94 \$ 288,94 \$ 27.0 \$ 288,94	kWh - gas generated (1)		373,188,502		(867,792)			2,119,612,254		1,622,656,098	30.63%
MMBTU's consumed         -         -         -         288,337         421,2           \$/per MMBTU consumed         \$ 2.53         \$ 2	Cost per MWh - gas combined	\$	19.43	\$	9.69		\$	22.22	\$	15.86	40.05%
MMBTU's consumed         -         -         -         288,337         421,2           \$/per MMBTU consumed         \$ 2.53         \$ 2	Gas expense GEC simple - variable	•		Ф			Ф	720 221	•	970 769	-24 889/
\$/ per MMBTU consumed kWh - gas generated         724,051         (539,246)         25,200,117         35,533,6           Cost per MWh - gas simple         \$ -         \$ -         \$ 28,94         \$ 27.           Cost per MWh - gas & oil ct         \$ 20,02         \$ 165.10         \$ 22.77         \$ 16.           Natural gas expense - fixed         \$ 3,073,104         \$ 2,350,454         30.75%         \$ 18,138,499         \$ 15,254,50           Total generated power:           Fuels expense         \$ 16,292,654         \$ 13,486,788         20.80%         \$ 98,482,580         \$ 92,873,40           kWh generated         547,890,960         552,686,322         -0.87%         3,120,564,206         3,747,110,50           Cost per MWh         \$ 29.74         \$ 24.40         21.86%         \$ 31.56         \$ 24.40		ψ	-	Ψ	-		Φ		ψ	421,246	-24.88% -31.55%
kWh - gas generated         724,051         (539,246)         25,200,117         35,533,6           Cost per MWh - gas simple         \$ - \$ - \$ - \$         \$ 28.94         \$ 27.           Cost per MWh - gas & oil ct         \$ 20.02         \$ 165.10         \$ 22.77         \$ 16.           Natural gas expense - fixed         \$ 3,073,104         \$ 2,350,454         30.75%         \$ 18,138,499         \$ 15,254,50           Total generated power:           Fuels expense         \$ 16,292,654         \$ 13,486,788         20.80%         \$ 98,482,580         \$ 92,873,40           kWh generated         547,890,960         552,686,322         -0.87%         3,120,564,206         3,747,110,50           Cost per MWh         \$ 29,74         \$ 24.40         21.86%         \$ 31.56         \$ 24.40			-		-		Ф		Φ	2.30	9.74%
Cost per MWh - gas simple         \$ - \$ - \$         \$ 28.94 \$ 27.           Cost per MWh - gas & oil ct         \$ 20.02 \$ 165.10         \$ 22.77 \$ 16.           Natural gas expense - fixed         \$ 3,073,104 \$ 2,350,454         30.75% \$ 18,138,499 \$ 15,254,5           Total generated power:           Fuels expense         \$ 16,292,654 \$ 13,486,788 \$ 20.80% \$ 98,482,580 \$ 92,873,4           kWh generated         \$ 547,890,960 \$ 552,686,322 \$ -0.87% \$ 3,120,564,206 \$ 3,747,110,5           Cost per MWh         \$ 29.74 \$ 24.40 \$ 21.86% \$ 31.56 \$ 24.	•		724.054		(530 346)		Φ		ψ		-29.08%
Cost per MWh - gas & oil ct         \$ 20.02         \$ 165.10         \$ 22.77         \$ 16.           Natural gas expense - fixed         \$ 3,073,104         \$ 2,350,454         30.75%         \$ 18,138,499         \$ 15,254,5           Total generated power:           Fuels expense         \$ 16,292,654         \$ 13,486,788         20.80%         \$ 98,482,580         \$ 92,873,4           kWh generated         547,890,960         552,686,322         -0.87%         3,120,564,206         3,747,110,5           Cost per MWh         \$ 29.74         \$ 24.40         21.86%         \$ 31.56         \$ 24.40		\$	724,051	\$	(559,240)		\$		\$	27.32	5.92%
Natural gas expense - fixed \$ 3,073,104 \$ 2,350,454 \$ 30.75% \$ 18,138,499 \$ 15,254,555    Total generated power:  Fuels expense \$ 16,292,654 \$ 13,486,788			20.02		165.10						
Total generated power:           Fuels expense         \$ 16,292,654         \$ 13,486,788         20.80%         \$ 98,482,580         \$ 92,873,4           kWh generated         547,890,960         552,686,322         -0.87%         3,120,564,206         3,747,110,5           Cost per MWh         \$ 29.74         \$ 24.40         21.86%         \$ 31.56         \$ 24.40						<b>.</b>				16.54	37.68%
Fuels expense         \$ 16,292,654         \$ 13,486,788         20.80%         \$ 98,482,580         \$ 92,873,4           kWh generated         547,890,960         552,686,322         -0.87%         3,120,564,206         3,747,110,5           Cost per MWh         \$ 29.74         \$ 24.40         21.86%         \$ 31.56         \$ 24.40	•	\$	3,073,104	\$	2,350,454	30.75%	\$	18,138,499	\$	15,254,579	18.91%
kWh generated         547,890,960         552,686,322         -0.87%         3,120,564,206         3,747,110,5           Cost per MWh         \$ 29.74         \$ 24.40         21.86%         \$ 31.56         \$ 24.	•	•	40.000.05	Φ.	40 400 705	00.0001	•	00 400 505	•	00.070.445	00:0
Cost per MWh \$ 29.74 \$ 24.40 21.86% \$ 31.56 \$ 24.		\$		\$			\$		\$		6.04%
· · · · · · · · · · · · · · · · · · ·		Φ.		Φ	,,-		Φ		•		-16.72%
(1) Allocation of kWh generated is based upon a ratio of gas MBTU's (adjusted to oil equivalent - 95.5%) and oil MBTU's.	·						·		Ф	24.79	27.33%
	) Allocation of kWh generated is based upon a	ratio	of gas MBTU's	(ad	ljusted to oil equi	ivalent - 95.5%)	and	oil MBTU's.			
Cost of fuels		•	0.404	φ.	/4.4.704			404 441	•	0.700.050	
		\$		\$			\$		\$	2,722,252	
										15,564,467	
										11,461,066	
										19,705,033	
										286,043	
										2,136,931	
										25,743,078	
Natural gas - fixed <u>3,073,104</u> <u>2,350,454</u> <u>18,138,499</u> <u>15,254,5</u>	atural gas - fixed	_	3,073,104		2,350,454		_	18,138,499		15,254,579	

JEA Electric System Production Statistics (Con't.)

Production Statistics (Con't.) Purchased power: Plant Scherer Purchases	2017	ırch	2016	Variance	ivia 2017	rch		
Purchased power: Plant Scherer Purchases							2016	Variance
Plant Scherer Purchases				variatio	2011		2010	Variation
Purchases								
kWh purchased	\$ 4,034,224	\$	5,663,507	-28.77%	\$ 27,572,701	\$	27,067,771	1.87%
kWh purchased	124,215,000		71,041,000	74.85%	689,857,000		541,678,000	27.36%
Cost per MWh	\$ 32.48	\$	79.72	-59.26%	\$ 39.97	\$	49.97	-20.01%
TEA & other								
Purchases	\$ 7,437,074	\$	4,822,584	54.21%	\$ 34,408,573	\$	26,629,416	29.21%
kWh purchased	168,383,048		139,209,757	20.96%	760,824,623		749,376,790	1.53%
Cost per MWh	\$ 44.17	\$	34.64	27.50%	\$ 45.23	\$	35.54	27.27%
SJRPP								
Purchases	\$ 8,715,955	\$	8,770,977	-0.63%	\$ 57,892,062	\$	50,888,420	13.76%
kWh purchased	112,710,000		163,091,000	-30.89%	978,837,000		839,191,000	16.64%
Cost per MWh	\$ 77.33	\$	53.78	43.79%	\$ 59.14	\$	60.64	-2.47%
Total purchased power:								
Purchases	\$ 20,187,253	\$	19,257,068	4.83%	\$ 119,873,336	\$	104,585,607	14.62%
kWh purchased	 405,308,048		373,341,757	8.56%	2,429,518,623		2,130,245,790	14.05%
Cost per MWh	\$ 49.81	\$	51.58	-3.44%	\$ 49.34	\$	49.10	0.50%
Subtotal - generated								
and purchased power:	\$ 36,479,907	\$	32,743,856	11.41%	\$ 218,355,916	\$	197,459,056	10.58%
Fuel interchange sales	(545,314)		(37,059)	1371.48%	(2,383,376)		(458,815)	419.46%
Earnings of The Energy Authority	(641,801)		(206,021)	211.52%	(1,768,203)		(1,463,721)	20.80%
EPA Allowance Purchases	-		-		233,775		-	
Realized and Unrealized (Gains) Losses	184,800		610,200	-69.71%	301,200		2,236,800	-86.53%
Fuel procurement and handling	878,947		955,087	-7.97%	5,437,834		5,364,611	1.36%
By product reuse	1,490,675		2,122,220	-29.76%	6,553,581		8,011,701	-18.20%
Total generated and net purchased power:								
Cost, net	 37,847,214		36,188,283	4.58%	226,730,727		211,149,632	7.38%
kWh generated and purchased	 953,199,008		926,028,079	2.93%	5,550,082,829		5,877,356,301	-5.57%
Cost per MWh	\$ 39.71	\$	39.08	1.60%	\$ 40.85	\$	35.93	13.71%
Reconciliation:								
Generated and purchased power per above	\$ 37,847,214	\$	39.71		\$ 226,730,727	\$	40.85	
SJRPP operating expenses:								
SJRPP O & M	(2,971,320)		(3.12)		(11,954,449)		(2.15)	
SJRPP debt service	(3,021,022)		(3.17)		(18,806,074)		(3.39)	
SJRPP R & R	2,074,511		2.18		11,231,476		2.02	
SCHERER operating expenses:								
Scherer power production	(656,182)		(0.69)		(3,665,558)		(0.66)	
Scherer R & R	487,253		0.51		(2,249,490)		(0.41)	
Scherer transmission	(471,518)		(0.49)		(2,674,527)		(0.48)	
Scherer taxes	(98,281)		(0.10)		(580,506)		(0.10)	
Florida and other capacity	(642,891)		(0.67)		(3,318,107)		(0.60)	
MEAG	(951,197)		(1.00)		(3,514,525)		(0.63)	
Rounding	(1)		(0.00)		(2)		(0.00)	
	\$ 31,596,566	\$	33.15		\$ 191,198,965	\$	34.45	

JEA Electric System SJRPP Sales and Purchased Power

		Мо	nth			Year-t	Year-to-Date					
			rch			Ma	rch					
		2017		2016		2017		2016				
MWh sales												
JEA		112,710		163,091		978,837		839,191				
FPL saleback		88,808		121,229		655,785		690,559				
FPL direct portion Total MWh sales		50,379 251,897		71,080 355,400		408,656 2,043,278		382,438 1,912,188				
Total WWTI Sales	-	231,097		333,400		2,043,270		1,912,100				
Fuel costs (Includes fuel handling expenses)	\$	4,806,880	\$	5,796,791	\$	38,394,575	\$	31,467,758				
Less interest credits: inventory bank		(9,465)		(5,531)		(37,477)		(27,220)				
Plus (less): true-up interest Total		708 4,798,123	-	289 5,791,549		5,916 38,363,014		1,011 31.441.549				
Total		4,790,123		3,791,349		30,303,014		31,441,349				
Cost per MWh	\$	42.57	\$	35.51	\$	39.19	\$	37.47				
Operating and maintenance expenses		2,972,707		1,495,640		11,997,126		9,691,447				
Less: operations bank interest		(1,386)		(502)		(6,541)		(2,904)				
Less: annual variable o & m true-up						(36,136)		3,039				
Total		2,971,321		1,495,138		11,954,449		9,691,582				
Cost per MWh	\$	26.36	\$	9.17	\$	12.21	\$	11.55				
Debt service contribution												
Principal		2,208,083		2,331,562		13,248,448		13,989,376				
Interest		1,349,441		1,378,499		8,096,654		8,700,938				
Less credits:												
Reserve Issue 2		(278,717)		(256,770)		(1,250,769)		(1,515,154)				
Reserve Issue 3		(13,200)		(13,219)		(80,339)		(83,539)				
Debt service Issue 2 Debt service Issue 3		(21,064) (6,698)		(9,105) (3,058)		(23,736) (6,698)		(9,216) (3,058)				
Bond proceeds COB		(2,722)		(5,050)		(49,268)		(2,137)				
General reserve Issue 2		(10,129)		83,198		(80,697)		(89)				
General reserve Issue 3		(30,242)		(9,370)		(39,565)		(11,232)				
Build America Bonds subsidy		(32,433)		(34,190)		(194,599)		(205,141)				
Inventory carrying costs		(66,573)		(63,028)		(410,368)		(359,780)				
Total		3,095,746		3,404,519		19,209,063		20,500,968				
Cost per MWh	\$	27.47	\$	20.87	\$	19.62	\$	24.43				
R & R contribution		309,387		339,343		1,856,320		2,036,058				
Less: interest credit		(74,724)		(53,462)		(402,988)		(269,516)				
Less: cumulative capital recovery amount		(2,383,898)		(2,206,110)		(13,087,796)		(12,512,221)				
Total		(2,149,235)		(1,920,229)		(11,634,464)		(10,745,679)				
Cost per MWh	\$	(19.07)	\$	(11.77)	\$	(11.89)	\$	(12.80)				
Debt service coverage		2,108,000		2,230,000		4,215,000		4,347,000				
Transfer to JEA		(2,108,000)		(2,230,000)		(4,215,000)		(4,347,000)				
Total		-		-		-		-				
Cost per MWh	\$	-	\$	-	\$	-	\$	-				
Total	\$	8,715,955	\$	8,770,977	\$	57,892,062	\$	50,888,420				
kWh purchased		112,710,000		163,091,000		978,837,000		839,191,000				
Cost per MWh	\$	77.33	\$	53.78	\$	59.14	\$	60.64				
Oost per www.ii	φ	11.55	φ	33.70	φ	33.14	φ	00.04				



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# Board of Directors Meeting April 18, 2017



## Water & Wastewater Monthly Operations Scorecard

Water & Wastewater	FY2016	FY2017 Goal	FY2017 YTD	Status
JEA Safety RIR	1.82	1.40	2.21	
Sales Forecast (kGals in 1000's)	36,358	34,558	36,594	
Water Unplanned Outages (# cust.)	12,735	9,000	2,999	
CUP Compliance	Yes	Yes	Yes	
Nitrogen to the River (tons)	527	550	286	
Sanitary Sewer Overflows (SSO's)	32	27	24	

#### **Significant Occurrences or Concerns This Month**

- Seven (7) OSHA recordable safety incidents for JEA in March, 23 YTD
- Unplanned Water Main Outages: 1,309 customers in March, event communication enhancements ongoing
- CUP: Average daily flow of 107 MGD was 20% below CY limit of 133 MGD; reclaim usage reached 20 MGD
- Nitrogen to River: 286 tons YTD with storm impacts, current forecast is 573 tons trending towards 550 tons
- SSO's Impacting Waters of the US: Twenty-Four (24) year-to-date, excluding the Hurricane events

## **Electric Monthly Operations Scorecard**

Electric System	FY2016	FY2017 Goal	FY2017 YTD	Status
JEA Safety RIR	1.82	1.40	2.21	<b></b>
Sales Forecast (million MWh)	12.6	12.4	12.0	
T&D Grid Performance Customer Outage				
Frequency (outages/year)	1.4	1.8	1.21	
Electric Outage Duration (minutes/year)	71	80	72.1	
Transmission Line Faults (# per 100 miles)	0.7	2.5	1.0	
CEMI <sub>5</sub> (% cust. > 5 outages/year)	1.4	1.5	0.7	
Generating Plant Performance				
Generation Fleet Reliability (forced outages rate)	2.0	2.1	0.9	
Environmental Compliance (permit exceedances)	4	5	3	

#### **Significant Occurrences or Concerns This Month**

- Generation Fleet performing well this winter. All 3 Northside successfully completed planned outages last fall. Fleet reliability is very good (at 0.90) through first 2 quarters of FY17.
- Despite a tough weather year, T&D grid performance metrics all better than targets. Excellent recovery work by JEA field crews.

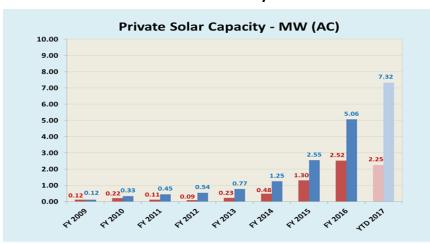


# Customer Experience Monthly Operations Scorecard

Customer Experience	FY2016	FY2017 Goal	FY2017 YTD	Status
JDP Customer Satisfaction Index - Residential	2 <sup>nd</sup> Q	1 <sup>st</sup> Q	1 <sup>st</sup> Q	
JDP Customer Satisfaction Index - Business	#1	Top Decile	#12	
Overall First Contact Resolution Index	79.4%	≥79.4%	81.2%	
Self Service Utilization	77.2%	≥78.5%	81.2%	
Net Write-Offs	0.14%	≤0.20%	0.16%	

#### **Significant Occurrences or Concerns This Month**

#### 10MW Policy Limit for Private Solar To Be Reached by September



- •The installation rate of net-metered private solar on the JEA system is growing
- •At the current adoption rate the 10 MW cap may be reached by September, 2017.
- •The annualized subsidy for the current 7.32 MW of installed private city is \$676,000 annually



## **Financial Results and Cost Metrics**

Electric Systems Metrics Forecast						
	Rating Agency/ Perform. Goal	Forecast	Score			
System Sales (GWh)	12,000	12,026				
Base Revenue Growth	(0.1%)	(0.1%)				
Debt Svc. Coverage	2.3x	2.4x				
Days Liquidity (Cash)	318 (215)	311 (208)				
Debt/Asset %	62%	62%				
Non-Fuel/MWh	\$53.94	\$55.02				
Net Funded Debt Reduction	\$216m	\$216m				
Capital Expenditures	\$166m	\$151m				
Moody's/S&P/Fitch Ratings	Aa2/AA-/AA	Aa2/AA-/AA				

Water and Sewer Systems Metrics Forecast						
	Rating Agency/ Perform. Goal	Forecast	Score			
Water System Sales (mGals)	35,000	36,594				
Base Revenue Growth	(1.3%)	(0.2%)				
Debt Svc. Coverage	2.5x	2.6x				
Days Liquidity (Cash)	507 (405)	558 (459)				
Debt/Asset %	50%	50%				
Water Cost/kgal	\$4.75	\$4.80				
Sewer Cost/kgal	\$10.27	\$10.59				
Net Funded Debt Reduction	\$77m	\$77m				
Capital Expenditures	\$205m	\$217m				
Moody's/S&P/Fitch Ratings	Aa2/AA/AA	Aa2/AAA/AA				

#### **Significant Occurrences or Concerns This Month**

• Have incurred \$18.5MM of actual expenses YTD from Hurricane Matthew which includes a significant portion of the mutual aid costs.



## III. A. 5. JEA Operations Report

## **JEA Operations Report**

(March 31, 2017)

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# Board of Directors Meeting April 18, 2017



## **JEA Safety**

(March 31, 2017)

#### **FY2016**

- RIR = 1.82
- # of Recordables = 38
- March YTD Recordables = 18

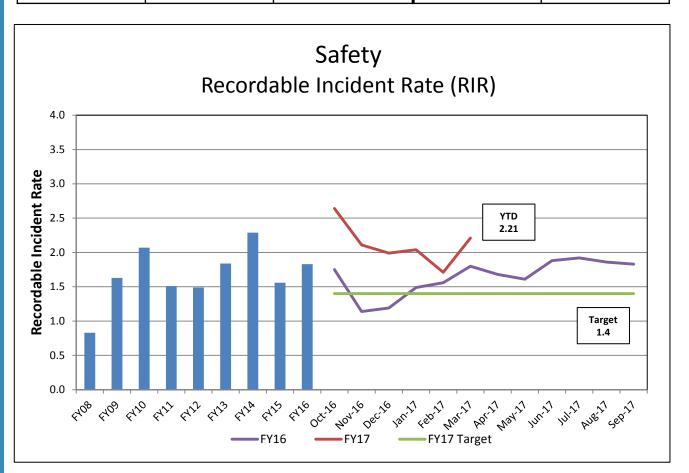
#### FY2017

- March Recordables = 7
- March YTD Recordables = 23
- 6 (26%) was lost time
  - o Electric Systems = 12
  - Water/WW Systems = 10
  - o Customer Relationships = 1
- Continuing to "Plan for Zero"
- Increased focus on:
  - o Complacency
  - Hand/Finger
  - o 0-5 Year Employees
  - o PPE Use
  - o Strains, Sprains, Slip/Trip/Fall
  - Repeat Occurrences

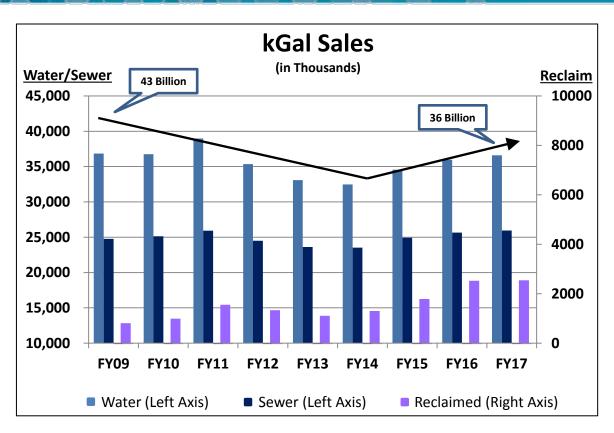
#### **Industry Benchmark\***

Average Municipal Utility RIR is 6.3 Average LPPC RIR is 3.7

Units	FY2017 YTD	FY2017 Target	FY2016	FY2015
RIR	2.21	1.4	1.82	1.56



## Water and Sewer System: kGal Sales



Month	FY16	FY17	%
Oct	3,120	3,129	0.3%
Nov	2,641	3,068	16.2%
Dec	2,758	2,923	6.0%
Jan	2,527	2,768	9.6%
Feb	2,479	2,624	5.9%
Mar	2,825	3,168	12.1%
YTD	16,351	17,680	8.1%
Apr	2,914		
May	3,523		
Jun	3,290		
Jul	3,736		
Aug	3,451		
Sep	3,094		
Total/Forecast	36,358	36,594	

Unit Sales Driver: YTD rainfall up 4 inches; rain days down 17.

Irrigation for February YTD FY17 up 31% versus

A L VTD EVAC							
YTD Customer Accounts							
	<u>FY16</u>	<u>FY17</u>	<u>%</u>				
Water	332,602	340,627	2.4%				
Sewer 257,410 264,059 2.6%							
Reclaimed	7,421	9,305	25.4%				

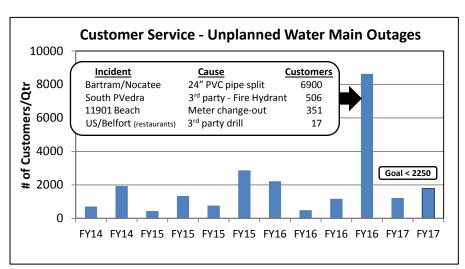
	YTD Rainfall					
	30-Yr. Avg.	<u>FY16</u>	<u>FY17</u>			
Inches	19	14	18			
Days	47	45	28			

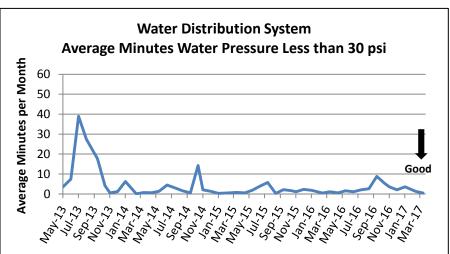
Total System	8.1%
Residential	8.1%
Comm./Industrial	0.6%
Irrigation	31.4%

## Customer Reliability Objectives Safety

Water and Wastewater System

Water Grid Performance	Metric	FY2017 YTD	FY2017 Target	FY2016	FY2015
Water Main Outages	# of Customers per Year	2,999	9,000	12,735	5,629





#### **Unplanned Water Outages**

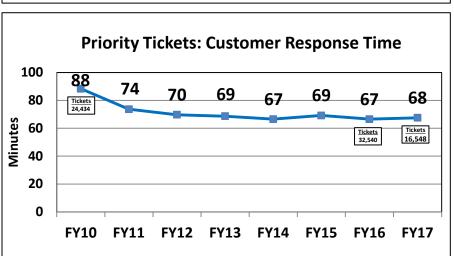
# of Customers Affected by Unplanned Outages has increased due to 3<sup>rd</sup> Party Damages

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

Measured by 110 pressure monitoring stations in the distribution system. Pressure must be greater than 20 psi, and is expected to be greater than 50 psi.

#### **Customer Response Time**

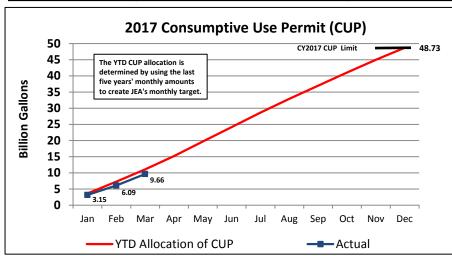
Average time from a customer call to the ticket completion or transfer to a field crew for a more extensive repair



## **Environmental Compliance**

Water System – Consumptive Use Permit (CUP)

Compliance	Metric – CY Basis	FY2017	2017 Target	2016	2015
Water	CUP Limits (MGD)	107	133 limit	<b>112</b> (131 limit)	<b>107</b> (131 limit)
South Grid	Wellfield Allocation (MGD)	43.88	< 50.23 limit	52.95 (<50.23 limit)	<b>47.50</b> (<50.23 limit)
Reclaim	Usage (MGD)	20	15	16	13



#### **CUP Condition 44: South Grid Wellfield Allocation Limits**

	Actuals <sub>y</sub>					
Critical Wellfields	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	2017	
Deerwood III	6.96	7.01	6.67	7.88	6.59	
Ridenour	5.97	6.39	6.66	7.64	5.79	
Oakridge	8.78	6.23	4.99	5.79	4.70	
Greenland		1.53	4.27	4.16	4.21	
Brierwood	5.58	4.53	2.84	3.36	2.01	
Subtotal	27.29	25.69	25.43	28.83	23.29	
Other Wellfields	22.21	20.92	22.07	24.12	20.59	
Total South Grid	49.50	46.61	47.50	52.95	43.88	
Total System MGD	100	104	107	112	107	

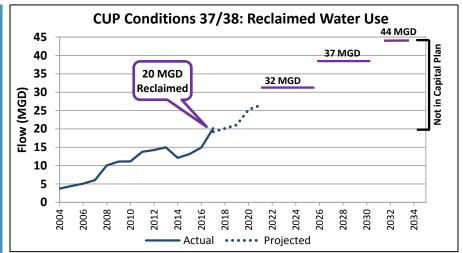
Post	
Sep -14	
<u>Limit</u>	
7.00	
6.85	
5.65	
4.53	
3.02	
27.05	
23.18	
50.23	þ
131	

#### St. Johns River Water Management District CUP

Condition 12: YTD average daily flow was 20% below CY limit of 133 MGD

<u>Condition 44</u>: South Grid Wellfields were 6% above the base limit in FY16, yet have annual operational flexibility of 20% above allocation limits. FY17 is 13% below the limit.

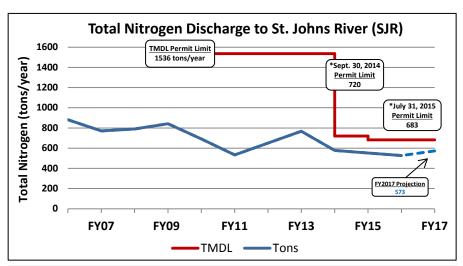
Conditions 37/38: Use of reclaimed water "to the maximum extent technologically, economically, and environmentally feasible". The annual CUP limit continues to increase beginning in FY21 if 32 MGD is achieved.

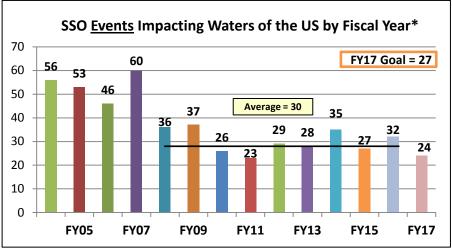


## **Environmental Compliance**

Wastewater System

Compliance	Metric	FY2017 YTD	FY2017 Target	FY2016	FY2015
Sewer	Nitrogen (N) Tons – FY basis	286	550	<b>527</b> (TMDL of 683*)	553 (TMDL of 683*)



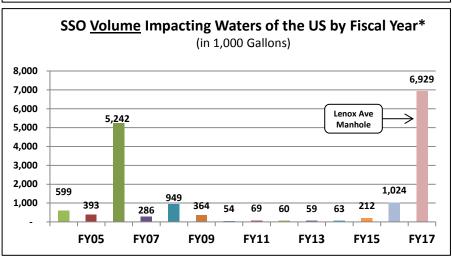


#### Nitrogen Discharge to St. Johns River

Florida Department of Environmental Protection (FDEP) has reduced the Total Maximum Daily Load (TMDL) to 683 tons with Water Quality Trading Credits allocated to the COJ

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

FY08 - FY16 SSO's averaged 30 per year. Twenty-Four (24) SSO's year-to-date impacting US Waters excluding events occurring during Hurricane Matthew.



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

## Water and Sewer System: Financial Results and Cost Metrics

#### (\$ in thousands)

Revenues	FY17 Forecast	FY16 Actual	FY17 Budget	FY17 vs FY16 (\$)	Variance (%)
Water & Sewer Revenues	\$ 409,267	\$ 409,889	\$ 394,430	\$ (622)	-0.2%
Other Revenue	36,529	40,070	33,792	(3,541)	-8.8%
Total Revenues	\$ 445,796	\$ 449,959	\$ 428,222	\$ (4,163)	-0.9%
	1	\$18M	<b>†</b>		
Select Expenses					
O & M Expense	\$ 138,289	\$ 130,296	\$ 144,149	\$ (7,993)	-6.1%
Net Revenues	\$ 304,595	\$ 313,130	\$ 280,753	\$ (10,045)	-3.2%
	1	\$24M	<b>^</b>		
Capital Expenditures	\$ 217,095	\$ 147,363	\$ 205,000 <sup>1</sup>	\$ (69,732)	-47.3%
Debt Service	\$ 115,506	\$ 95,418	\$ 118,375	\$ (20,088)	-21.1%

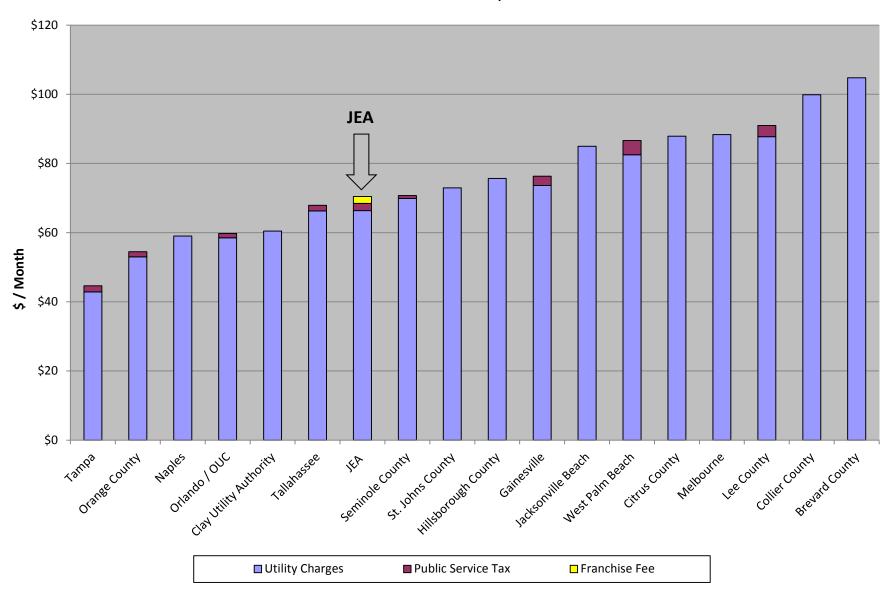
Cost / Kgal	Water	Sewer
Target	\$ 4.75	\$ 10.27
Forecast	4.80	<u> 10.59</u>
Difference	\$ (0.05)	\$ (0.32)

Metrics	FY17 Forecast
Coverage:	2.6x
Days Liquidity/Cash:	558 / 459
Debt/Asset:	50% (3% lower)
Total Debt:	\$1.6B (\$34M lower)

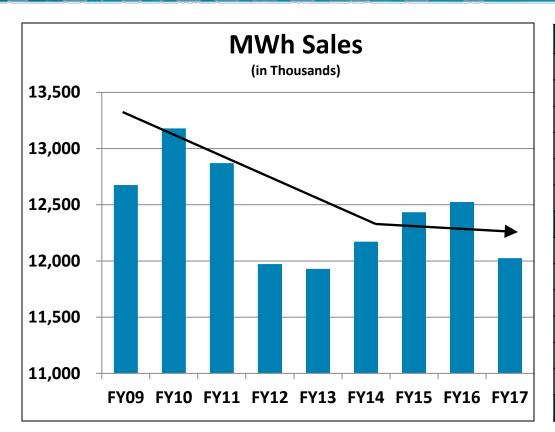


#### Water & Sewer Rates in Florida

Residential Service with a 5/8" meter and 6 kgals of Consumption Residential Rates as of April 2017



## **Electric System: MWh Sales**



Month	FY16	FY17	%
Oct	952,515	951,425	(0.1%)
Nov	923,705	863,238	(6.5%)
Dec	922,956	905,219	(1.9%)
Jan	1,049,897	932,807	(11.2%)
Feb	894,563	759,141	(15.1%)
Mar	893,954	914,242	2.3%
YTD	5,637,590	5,326,073	(5.5%)
Apr	900,013		
May	1,089,555		
Jun	1,231,251		
Jul	1,336,836		
Aug	1,254,240		
Sep	1,111,769		
Total/Forecast	12,561,253	12,025,900	

<u>Unit Sales Driver</u>: YTD MWh reduction due to moderate weather and decrease in FPU

demand.



YTD Degree Days					
30-yr. Avg.	30-yr. Avg. FY16 FY17				
1,651	1,567	1,241			

YTD Customer Accounts					
FY16	FY17	<u>%</u>			
451,523	458,767	1.6%			

Total System	(5.5%)
Residential	(6.2%)
Comm./Industrial	(3.3)%
Interruptible	(1.2%)
Wholesale (FPU)	(49.9%)

### **FY 2017 Performing Objectives**

#### **Electric Systems Reliability Metrics**

T&D Grid Performance	Metric	FY2017 YTD	FY2017 Target	FY2016	FY2015
Customer Outage Frequency*	# of Outages per Year	1.21	1.8	1.4	1.8
Electric Outage Duration*	# of Minutes out per Year	72.1	80	71	99
Transmission Line Faults	# of Faults per 100 miles	1.0	2.5	0.7	2.8
CEMI <sub>5</sub> *	% Customers > 5 outages per yr	0.7	1.5	1.4	2.1

#### **Electric Service** Reliability

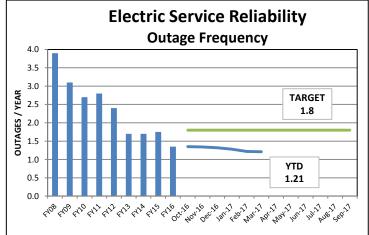
- Outage frequency and duration have been reduced significantly over the last 8 years; running flat this year and near the FY2017 targets.
- The typical JEA customer sees 1.21 outages per year and a total outage duration of 72.1 minutes
- CEMI<sub>5</sub>: 3,315 (.70%) of our customers have experienced more than 5 outages in the past 12 months

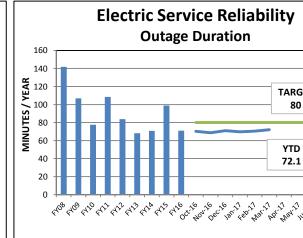
#### Transmission Line Reliability

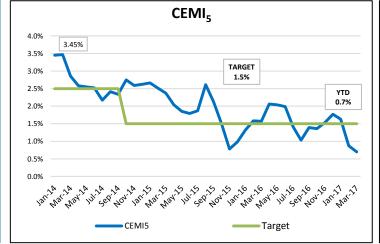
- Overall downward trend over the last eight years
- YTD (1.0) running below the FY17 target

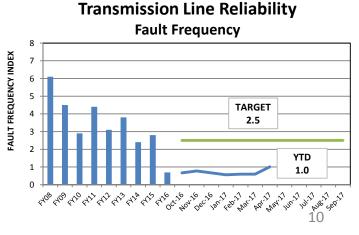
#### **Other Operational Metrics**

 Continue showing favorable trends over time









**TARGET** 

80

YTD

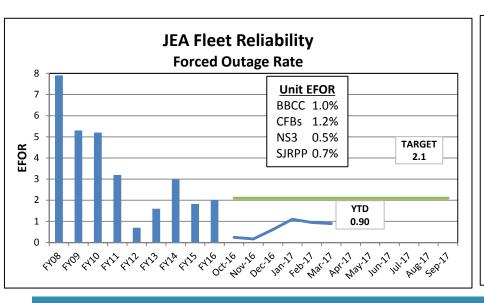
72.1

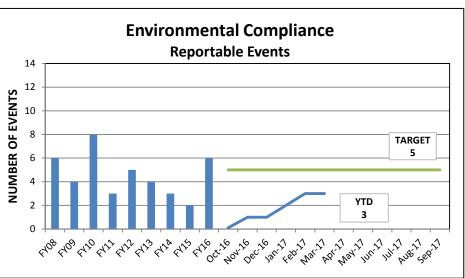
<sup>\*</sup>Aligned with the PSC Rule for Electric Reliability Reporting, the Operational Metrics will exclude the impact of all service interruptions associated with a storm named by the National Hurricane Center.

### **JEA FY 2017 Performing Objectives**

#### **Electric Systems Reliability Metrics**

Generating Plant Performance	Metric	FY2017 YTD	FY2017 Target	FY2016	FY2015
Generation Fleet Reliability	Forced Outages Rate	0.9	2.1	2.0	1.8
Environmental Compliance	Permit Exceedances	3	5	6	2





#### **Generating Fleet Reliability**

- The JEA fleet Forced Outage Rate is in line with prior 6-year performance and better than FY2017 target of 2.1
- Planned outage work completed this past fall on all 3 Northside steam units.
- High unit reliability contributes to lower fuel and non-fuel expenses

#### **Environmental Compliance**

- Excellent environmental performance in prior years. No air permit exceedances occurred in FY16.
- Electric System's have experienced 3 reportable events during FY2017.
- JEA remains actively engaged in and preparing for all new and emerging environmental regulations.

## Electric System: Financial Results and Cost Metrics

(\$ in thousands)

				- 415	
Revenues	FY17 Forecast	FY16 Actual	FY17 Budget	FY17 vs FY16 (\$)	Variance (%)
Fuel Revenue	\$ 392,3921	\$ 426,653 <sup>2</sup>	\$ 449,776	\$ (34,261)	-8.0%) <sup>1</sup>
Base Revenue	749,394 <sup>1</sup>	750,038	735,204	(644)	-0.1%
Other Revenue	43,629	37,904	41,787	5,725	15.1%
Total Revenues	\$ 1,185,415	\$ 1,214,595	\$ 1,226,767	\$ (29,180)	(2.4%)
	<b>†</b>	\$-41M	<u> </u>		
Select Expenses					
Fuel Expense	\$ 438,413	\$ 397,280	\$ 411,903	\$ (41,133)	-10.4%
Fuel Fund Transfers	(46,021)	29,373	37,705	75,394	
O & M Expense	208,404	192,527	226,180	(15,877)	-8.2%
Non-fuel Purchased Power	78,205	87,426	83,394	9,221	10.5%
Net Revenues	\$ 507,039	\$ 496,092	\$ 454,939	\$ 10,947	2.2%
	Ť	\$52M	Ť		
Capital Expenditures	\$ 151,343	\$ 150,926	\$ 153,200 <sup>3</sup>	\$ (417)	-0.3%
Debt Service	S 210.490 <sup>4</sup>	\$ 171.506	\$ 179.654	\$ (38,984)	-22.7%

Electric Costs / MWh	Non-Fuel
Target	\$ 53.94
Forecast	55.02
Difference	\$ (1.08)

Fuel Fund <i>(\$ in millions)</i>	
Beginning Balance	\$ 180
Surplus/(Deficit)	(46)
Ending Balance	\$ 134

Financial Metrics	FY17 Forecast
Coverage:	2.4x
Days Liquidity/Cash:	311 / 208
Debt/Asset:	62% (3% lower)
Total Debt:	\$2.8B (\$146M lower)



<sup>&</sup>lt;sup>1</sup> Includes rate change in December 2016

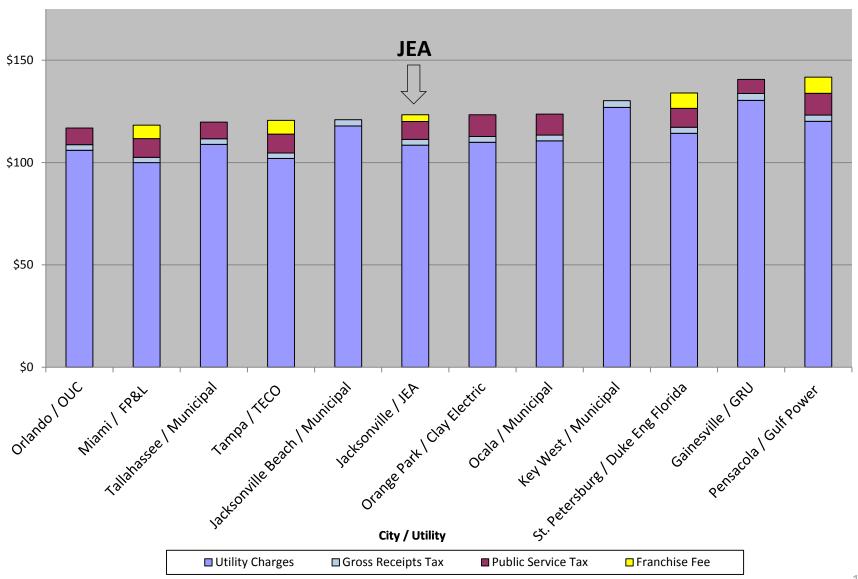
<sup>&</sup>lt;sup>2</sup> Net of \$57 million fuel credit and fuel rate reduction

<sup>&</sup>lt;sup>3</sup> Council approved limit for capital expenditures in FY17 is \$170 million

<sup>&</sup>lt;sup>4</sup> Includes additional \$40 million related to advanced debt refunding approved by Board in November 2016

#### Florida Utilities Monthly Residential Electric Bill Comparison

(Consumption @ 1,000 kWh)
Residential Rates as of April 2017



# JEA Operations Report

# **Customer Experience**

Presenter: Richard Vento

Date: April 2017



### **FY17 Customer Satisfaction Goal**

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

### Residential (R)

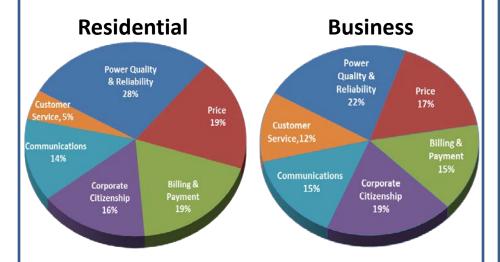
FY	15	FY	16	Wa	ve 1	Wa	ve 2	Wav	ve 3	Wa	ve 4	FY	<b>17</b>
1Q	692	2Q	703	1Q	749	1Q	782					1Q	766

### **Business (B)**

FY15 FY16 Wave 1 Wave 2 FY17 1Q 705 1Q 754 1Q 788 2Q 772 1Q 780

FY17 Residential # of companies ranked:

FY17 Business # of companies ranked:



1Q= 1st quartile 2Q=  $2^{nd}$  quartile 3Q =  $3^{rd}$  quartile 4Q =  $4^{th}$  quartile

138

86

### **Achieve 1st Quartile Ranking on All Drivers**

### Be Easy to Do Business With

### **Customer Service**

	FY	16	Wa	ve 1	Wa	ve 2	Wav	/e 3	Wa	ve 4	FY	17
R	1Q	782	1Q	808	1Q	840					1Q	825
В	1Q	782	2Q	817	1Q	841					1Q	829

### **Power Quality & Reliability**

	FY	16	Wa	ve 1	Wa	ve 2	Wa	ve 3	Wa	ve 4	FY	17
R	2Q	749	2Q	791	1Q	827					1Q	809
В	1Q	794	1Q	826	2Q	807					1Q	816

### **Empower Customers to Make Informed Decisions**

### **Billing & Payment**

	FY	16	Wa	ve 1	Wa	ve 2	Wav	ve 3	Wa	ve 4	FY	17
R	1Q	763	1Q	818	1Q	827					1Q	823
В	1Q	785	1Q	806	2Q	801					2Q	803

#### Communication

	FY	16	Wa	ve 1	Wa	ve 2	Wav	/e 3	Wa	ve 4	FY	17
R	1Q	665	1Q	713	1Q	751					1Q	732
В	1Q	721	1Q	766	1Q	748					1Q	757

#### Price

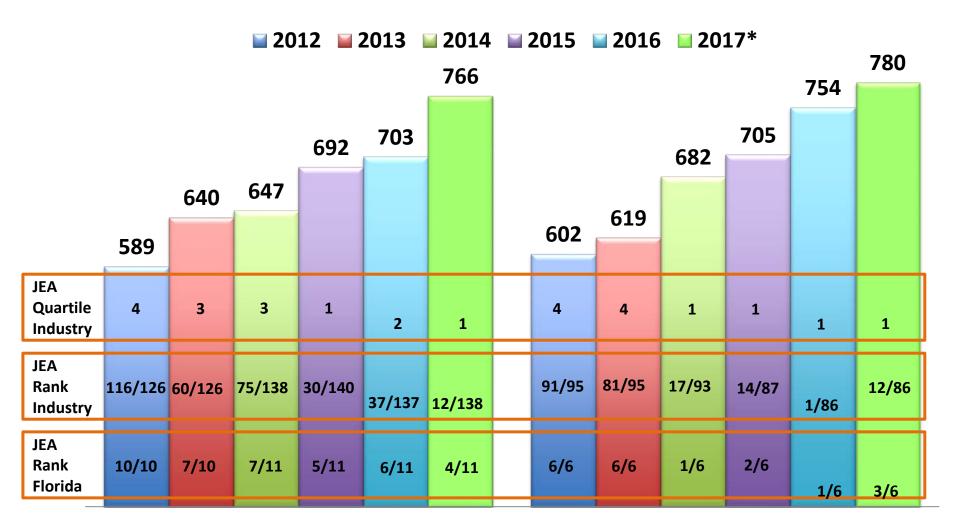
	FY	16	Wa	ve 1	Wa	ve 2	Wa	ve 3	Wa	ve 4	FY	17
R	2Q	630	2Q	671	1Q	721					1Q	696
В	1Q	701	1Q	744	2Q	726					1Q	735

### **Demonstrate Community Responsibility**

### **Corporate Citizenship**

	FY	16	Wa	ve 1	Wa	ve 2	Wav	ve 3	Wav	ve 4	FY	17
R	2Q	645	2Q	685	1Q	725					1Q	705
В	1Q	731	1Q	758	2Q	738					1Q	748

# **Customer Satisfaction Index Scores**



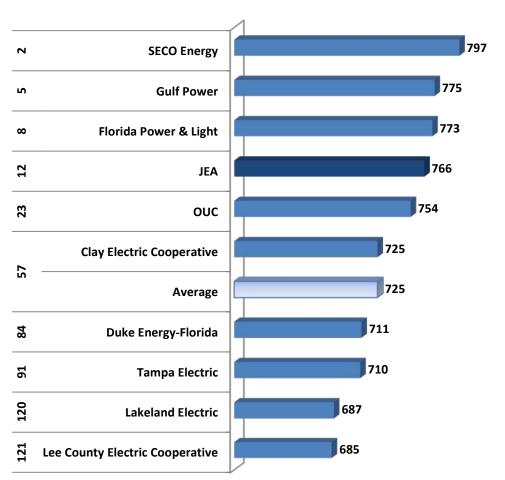


Residential

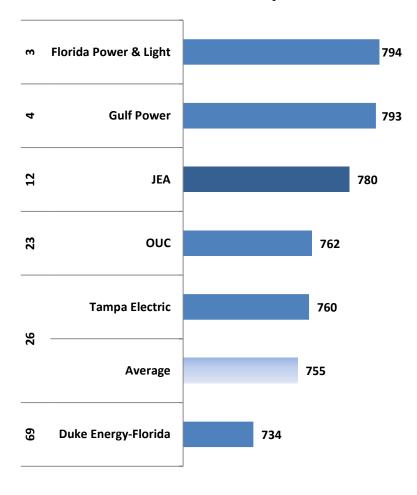
**Business** 

# **Customer Satisfaction Index Scores – Florida Utilities**

### **Residential FY17 YTD**



### **Business CY16/FY17**





Note: 2017 Wave 1 only

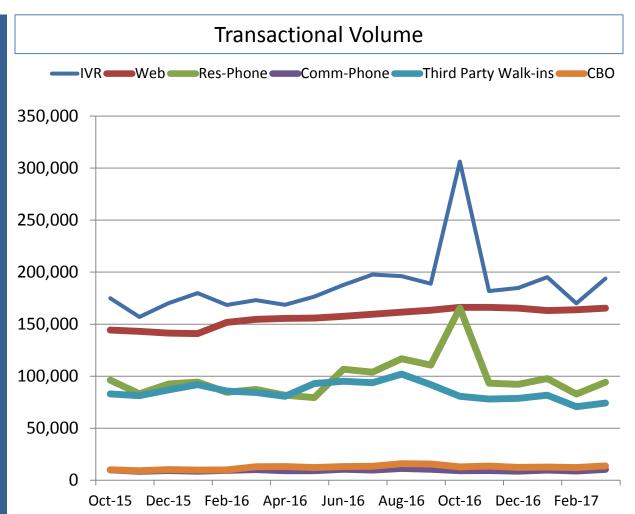
### **Customer Service**

## Easy to do Business With

Providing multiple contact channels allows the customer to interact with JEA in a way that's easiest for them.

Customer Satisfaction
Rating: 8s-10s by Channel - JDP

	JEA	JEA	Industry
	FY16	FY17	FY17
Phone	72.5%	78.9%	73.5%
ccc	57.0%	77.9%	70.7%
IVR	79.6%	79.5%	74.5%
Web	64.6%	87.8%	70.2%
Note: FV17 W	lave 2 VTD		





# Customer Service Easy to do Business With

Accurately addressing a customer's needs the first time produces a positive customer experience

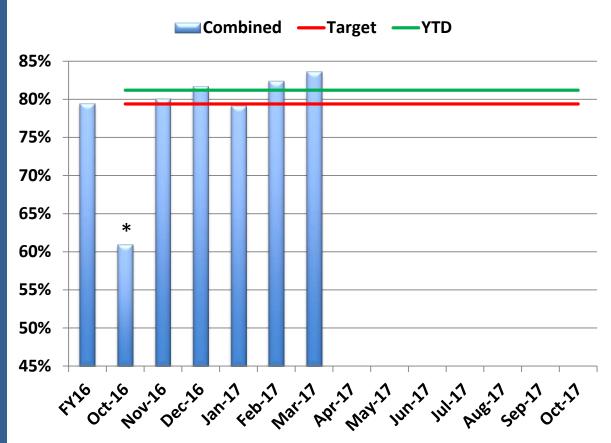
### **FY2017 YTD Transactional Study**

Residential CC	78.8%
Branches	83.9%
Commercial CC	81.7%
IVR	79.8%
jea.com	83.9%
Overall	81.2%

### **JD Power FCR**

	JEA	JEA	Industry
	FY16	FY17	FY17
Res CC/IVR	74.8%	70.5%	72.9%
Jea.com	77.7%	71.8%	72.1%
Bus CC/IVR	71.4%	82.1%	71.3%

First Contact Resolution
Branches, Call Centers, and jea.com



<sup>\*</sup> October decline result of Hurricane Mathew



# Power Quality & Reliability Easy to do Business With

Customers are more satisfied when receiving additional information when reporting an outage and when given updates when power is restored

# JD Power "Keeping you informed about outage"

Score	JEA	JEA	Ind
	FY16	FY17	FY17
8 – 10	37.9%	58.5%	47.2%

20.0%

< 5

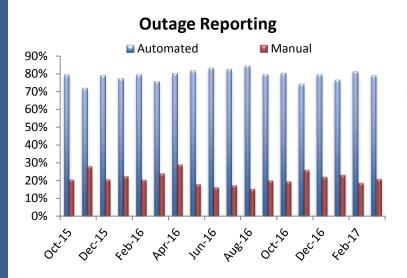
### **# Outage Information Points**

11.9%

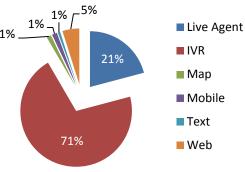
16.0%

	FY16	FY17
JEA	2.3	2.7
Industry	2.1	2.3

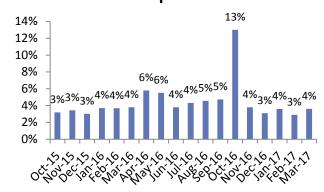
Note: FY17 Wave 2 YTD



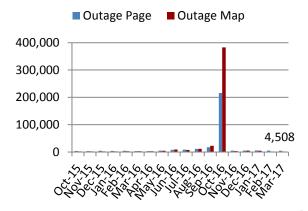
### Outage Reporting by Channel



### % Customers Receiving Outage Updates



### jea.com Outage Page Volume



### **Billing & Payment: Customer Solutions**

# **Empowering Customers to Make Informed Decisions**

Customer Solution Participation	FY17 Goal	FY17 YTD
e-Billing Participation	97,982	86,324
Levelized Bill Participation	25,592	20,833
AutoPay Participation	41,800	37,344
JEA MyWay Participation	19,418	16,117



The JEA Smart Home
AutoPay Giveaway begins
this month and concludes at
the end of May. We will be
giving away a Google Home
and Smart Lighting Starter
kit to three lucky Customers
who sign-up during the
campaign.

	FY17 YTD	Industry Benchmark*		
e-Bill	20.9%	18.5%		
Budget Bill	5.0%	9.0%		
Auto Pay 9.0% 13.0%				
*2015 IOU Benchmark Average				



### Communications

# **Empowering Customers to Make Informed Decisions**

Communicating with customers is a key driver of satisfaction and impacts all drivers.

# JDP Frequency of Received Communication FY17 YTD

Not enough 5%

Just right 86%

Too much 10%

### **JDP Comm Awareness**

### Residential

FY13 48.8% FY14 51.9% FY15 54.6% FY16 54.4% FY17 YTD 60.4%

### **Commercial**

FY13 53.4% FY14 55.7% FY15 68.7% FY16 55.4% FY17 YTD 64.2%



Win a Pair of Prizes!

#### Not One Gift ... But Two!

Sherry and Manson Alley have plenty of time to play dominoes in part because they take advantage of JEA AutoPay.



at lea.com/autonay

JEA first started offering it. They've never looked back.

"I don't have to write a check or go anywhere to pay my bill," said Shemy "I can't imagine life without it."

The Allev's signed up for the fre-

JEA AutoPay by logging in meter, calcul to your free online account. you a statem Scroll down to the bottom of the page and click on the link that says "Enroll or Manage AutoPay." Or call us at 665-6000 and enroll over the shone, Learn more

With JEA AutoPay, we still read you meter, calculate your bill and send you a statement every month. The only difference is that w'll automatically withdraw your balance due from your bank account.

"It's wonderful," Sherry said. "I just keep coming back to how convenient it is."



to enroil in Jt-A AutoPay, you cannot have an outstanding balance or your account or be in a JEA payment extension plan, All residential and commercial customers are eligible to enroll.

We are so sure you'll like this program that if you sign up for JEA AutoPay between April 1 and May 31, you'll be automatically entered in a givenway to win not one but TWO gifts: a Google Home and a Philip's Hue Smart Lighting Starter kit. Three lucky winners will be chosen at random to win this pair of prizes.

#### Natural Gas for Less

Did you know JEA is a natural gas supplier to area businesses? If you know a local business that uses natural gas, chances are good we can save that business money. Schedule a free consultation at Jea.com/naturalgas.

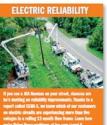


Remember to call 811 at least two

**April is National Safe Digging Month** 



incoate the electric, water, sweet, reclaimed, and fiber utilities buried underground to prevent personal injury and damages to our infrastructure. Damage to JFA infrastructure can be costly if you dig without calling 811 first. We are here to protect you and our underground utility infrastructure. Learn more at jea.com/dig.







DONATE HERE

Signify sharts with the feeder, that's stry life compleyees color over understay and seeds for the advantaged use, wasses and different and feeder than to Digark the life of the content of



## Communication Channels FY17

Volume: 124,927,400

- e-Com (jea.com, email, social) 29,970,367
- Paid Media
   (Radio, TV, Print)
   88,087,631
- Community Engagement (Events, Workshops) 373,352
- Other Communication (Bill Inserts, Brochures, 6,496,050



### **Corporate Citizenship**

# **Empowering Customers to Make Informed Decisions**

JEA Ambassadors are engaging customers throughout our community in a greatly expanded

### **FY17 Activities:**

way.

- Speakers Bureau—53
- Facility Tours—38
- Community Events—65
- Educational Partnership Activities—8



### **JEA Employee Volunteer Participation**







JEA Ambassadors participated in 25th World of Nations at Metropolitan Park. Customers were very interested in hearing about the numerous cost-saving products and services JEA offers.



JEA
Ambassadors
provided
customers
from Osher
Life Long
Learning
Institute at
UNF a tour of
the Brandy
Branch
facility.

Giving back to our community through volunteering is foundational as a community-owned utility

# FY17 Total Volunteers—424

#### March—81 Volunteers

- Gate River Run
- HabiJax Build
- St. Johns River Clean-up
- Feeding NE Florida Food Bank
- Math Counts State Competition

#### April—Vol. Events

- Greenscape Tree Festival April 1
- Catty Shack Wildlife Sanctuary –
   April 7
- Special Olympics April 8
- Hubbard House Annual Awareness
   Walk/Run April 8
- Walk to End Lupus April 9
- City Rescue Mission Community
  Closet April 13
- National MS Walk April 22
- Earth Day Downtown Clean-up –
   April 22
- HabiJax Home Build April 21 & 27
- Feeding NE Florida Food Bank April
   28
- MDA Muscle Walk April 29
- Butterfly Festival at Tree Hill April
- HandsOn Jacksonville "Celebrate Good" Festival – April 30



**JEA Ambassador Program** 

### **Corporate Citizenship: Environmental**

# **Demonstrating Community Responsibility**

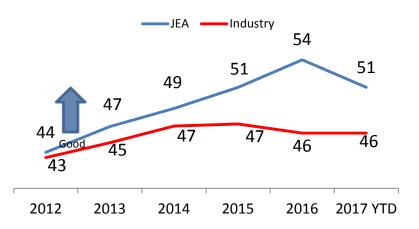
DSM Programs & Participation	FY17 Goal	FY17 YTD
Tracker Participation (Entering Site)	110,000	48,750
Invest Smart	395	309
Shop Smart	77,678	62,752
Neighborhood Energy Efficiency	1,262	602
Electric Vehicle Rebates	75	49

### **JEA Efficiency Assessments for Water and Irrigation**

JEA offers free efficiency assessments for all customers concerned with high water usage and especially, at this time of year, with irrigation systems.

- The JEA Efficiency Assessment Team provides from 400 to 600 electric and water assessments each month, inspecting irrigation heads for leaks, checking and adjusting the timer for the most effective usage of both internal water and irrigation.
- Customers can schedule an irrigation or water assessment through the Customer Service Center at 665-6000.
- Customer satisfaction of the Assessors and this program consistently scores 8 out of 10 or better.

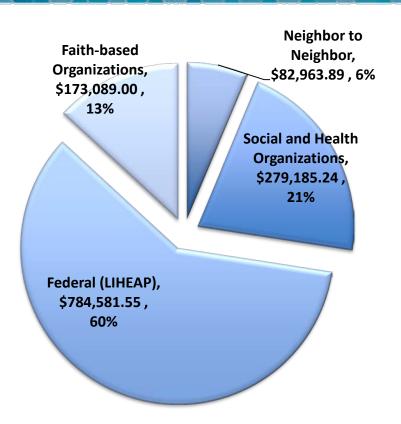
# Familiarity with Utility Energy Efficiency or Conservation Programs (%)





### **Corporate Citizenship: Customer Assistance Funding**

# **Demonstrating Community Responsibility**



Agency & Federal Customer Assistance FY 17 YTD \$1,319,819 20 agencies provided 795 utility payments on behalf of JEA customers in March 2017 totaling \$241,932





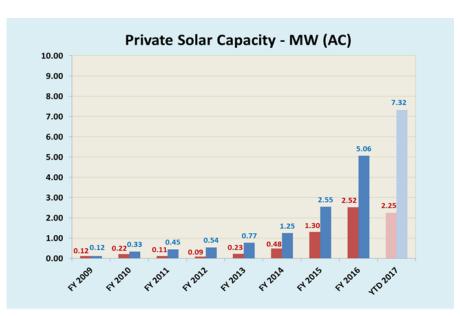
Number of Customers Receiving
Agency & Federal Utility Assistance
FY 17 YTD
4,198



# Private Solar Program Status (Net-Metered Solar)

### 10MW Policy Limit for Private Solar To Be Reached by September

- The installation rate of private solar on the JEA system is growing
- Solar capacity added in March was 0.31
   MW, YTD FY17 is 2.25 MW. Total aggregate capacity is 7.32 MW



- The annualized subsidy for the current 7.32
   MW of installed private city is \$676,000
   annually
- The table below reflects the current and future subsidy levels associated with private Solar:

	Current MW	10 MW Policy Limit	Each Future MW
Energy Subsidy	\$355,000	\$500,000	\$50,000
Capacity Subsidy	\$248,000	\$330,000	\$33,000
Taxes & Fees Subsidy	\$73,000	\$98,000	\$9,800
Subsidy Total	\$676,000	\$928,000	\$92,800
Subsidy 20-yr NPV	\$8,827,059	\$12,100,000	\$1,210,000





Monthly FY17 Communications & Engagement Calendar and Plan Update

# Return to Agenda



# FY17 Communications & Community Engagement Overview and March/April Update

<u>Overview:</u> Each month we update the board on communications and community engagement activities for the previous and current months. The purpose is to keep you informed about these activities so that you are knowledgeable about JEA's efforts to keep our customers informed, to assist them in the management of their utility services and to be a good corporate citizen.

Communications: In March, we launched our OneWater campaign, Part I, which tells customers about what JEA is doing to ensure the safety and availability of our water today and for the future. Part II, which focuses strictly on water conservation will launch in May. With sustained low rainfall, water conservation is taking front and center in our messaging calendar. You will see a lot more focus on this in the coming months. To demonstrate our environmental stewardship, on April 1 we partnered with Greenscape for their First Arbor Day event at Metropolitan Park. In April, we also kicked off our AutoPay campaign. All JEA customers who enroll in JEA AutoPay from April 1<sup>st</sup> – May 31<sup>st</sup>, 2017 will automatically be entered into our JEA Smart Home AutoPay Giveaway for their chance to win a Google Home and Smart Lighting Starter Kit. Otherwise we continued all key messages that were identified by J.D. Power as critical to customers. All paid and owned messaging is supported by social media, using Twitter, Facebook, Linkedin, Google+ and YouTube to provide additional timely, relevant information.

<u>Community Engagement:</u> JEA employees are actively involved in our community engagement efforts. JEA Ambassadors participate in activities where we have an opportunity to help customers manage their utility services and/or to educate customers about how JEA provides critical utility services to our community. These employees are trained and certified ahead of time to help JEA deliver on our mission. On the other hand, JEA Volunteers go out into the community to assist nonprofits accomplish their goals by offering their time and talents to help the nonprofit deliver their mission. Volunteers do not have any special training or talent; they just have a caring heart.

In March, Ambassadors spoke to several groups including CEO Paul McElroy speaking to the Society of American Military Engineers (SAME) and the Construction Management Association of America (CMAA) and CIO Paul Cosgrave speaking to the Ponte Vedra Rotary. Ambassadors conducted several facility tours including the Osher Lifelong Learners and Girl Scout Troop 2343. Ambassadors participated in a number of community events such as the 2017 Spring Home & Patio Show, 25<sup>th</sup> Annual World of Nations and numerous school career fairs.

Below, JEA Ambassadors participated in the Ft. Caroline Middle School Career Fair, where our linemen were a huge hit with the students.



In March, JEA volunteers came out in support of the Gate River Run, HabiJax Build, Dignity U Wear, St. Johns River Clean-up, Feeding NE Florida Food Bank, Math Counts State Competition, and the Greenscape Tree Festival.







St. Johns River Clean-up



Feeding NE Florida Food Bank

As a community-owned utility, JEA employees take a great pride in the Ambassador and Volunteer programs and these programs go a long way to tangibly demonstrate to customers and the community the incredible "Heart of JEA."

Co	mmunications Contacts* Generated Year to Date	124,927,400
•	Number of Paid Communications Contacts	88,087,631
	(Radio, Television, Out of Home, Online, Print)	
•	Number of Other Communications Contacts	6,496,050
	(Bill Insert, Bill Envelop, Brochure, etc.)	
•	Number of E-communications Contacts	29,970,367
	(jea.com Visitors, Email, Social Media, Videos)	
•	Number of Community Engagement Communications Contacts	373,352
	(Events, Public Speaking, Presentations, Training, Workshops, etc.)	

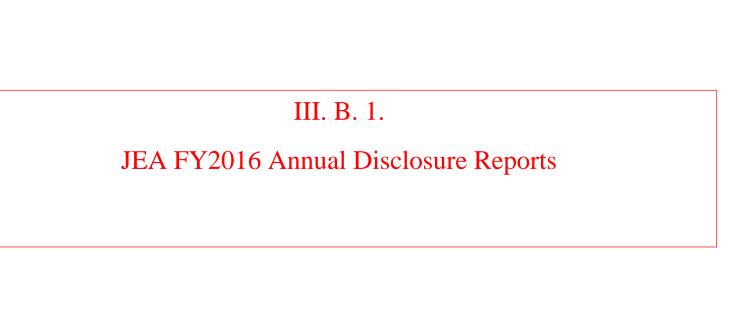
<sup>\*</sup>Communications Contacts are the opportunities we have to communication information to our customers.

	Α	В	С	D	E	F
1	Date	Event/Activity	Location	Time	Туре	Opportunity for Public to Attend or Participate
2	Mar-17					
3	3/2 - 5/2017	Spring Home & Patio Show	Prime Osborn	11am - 9pm	Ambassador Event	Yes
4	3/3/2017	Tulsa Welding School	Solar Farm & Brandy Branch Tour	9am	Ambassador Facility Tour	No
5	3/4/2017	Q&A With JEA	WOKV	11am	Ambassador Speaker	Yes
6	3/4 - 5/2017	2017 World of Nations	Met Park	11am - 7pm	Ambassador Event	Yes
7	3/6/2017	NACE Group	Buckman Plant Tour	10am	Ambassador Facility Tour	No
8	3/9 2017	TedX	NGS Tour	9am	Ambassador Facility Tour	No
9	3/11/2017	Brownie Troop 2343	Main St Lab	10am	Ambassador Facility Tour	No
10	3/11/2017	Lakewood Community Tree Planting	San Jose Neighborhood	8:30am	Ambassador Event	Yes
11	3/13/2017	Southside United Methodist Church	3120 S Hendricks Ave.	10:30am	Ambassador Speaker	No
12	3/14/2017	John E Love Elem Career Day	1531 Winthrop St	8am	Ambassador Event	No
13	3/15/2017	JEA Senior Day	JEA Lobby	10am	Ambassador Event	Yes
14	3/16/2017	Long Branch Elem. Career Fair	3723 Franklin St	9am - 2:45pm	Ambassador Speaker	No
15	3/16/2017	Robert E Lee High Career Day	1200 S McDuff Ave	9am	Ambassador Event	No
16	3/18/2017	Brownie Troop 1912	Main St Lab	10am	Ambassador Facility Tour	No
17	3/20/2017	COJ City Council Transportation & Energy Committee	City Hall	1pm	Ambassador Speaker	No
18	3/22/2017	Society of American Military Engineers (SAME) and the Construction Management Association of America (CMAA)	Ramada Inn - 3130 Hartley Rd.	11:30am	Ambassador Speaker	No

	А	В	С	D	E	F
19	3/22/2017	Regency IT Career Center Practicum	JEA Training Center	8am	Ambassador Event	No
20	3/23/2017	Mandarin Community Club	12447 Mandarin Rd	6pm	Ambassador Speaker	Yes
21	3/23/2017	Rotary Club of East Arlington	1700 Monument Rd	7:30am	Ambassador Speaker	No
22	3/24/2017	Greenscape Tree Planting	Drew Park - 6621 Barnes Rd. S	8am	Ambassador Event	Yes
23	3/25/2017	St Paul Lutheran Community Fair	2730 W Edgewood	9:30am	Ambassador Event	Yes
24	3/27/2017	SE CPAC Meeting	NEFBAR	6pm	Ambassador Speaker	Yes
25	3/28/2017	Jax Chamber Trade Show	UNF Center	10am	Ambassador Event	Yes
26	3/29/2017	Osher Life Long Learning	Solar Farm & Brandy Branch Tour	10am	Ambassador Facility Tour	No
27	3/30/2017	Ponte Vedra Rotary	Marsh Landing Country Club	7:30am	Ambassador Speaker	No
28	3/28 - 30/2017	Construction Career Days Expo	Jax Equestrian Center	9am	Ambassador Event	Yes
29	3/31/2017	FSCJ Class	Main St Lab Tour	9am	Ambassador Facility Tour	No
30	3/31/2017	Ft Caroline Middle School Career Fair	4787 University Club Blvd.	9am	Ambassador Event	No
31	Apr-17					
32	4/1/2017	Arbor Day Tree Festival	Met Park	9am	Ambassador Event	Yes
33	4/3/2017	River City Homeschool	Main St Lab Tour	10am	Ambassador Facility Tour	No
34	4/4/2017	Arlington Middle School Career Day	8141 Lone Star Rd	9am	Ambassador Event	No
35	4/6/2017	Duval County Health Dept. Resource Fair	Schultz Center	11:30am - 3:30pm	Ambassador Event	Yes
36	4/8/2017	Party in the Park for Prevention	Edward Waters College	10am	Ambassador Event	Yes
37	4/10/2017	Girl Scout Troop 1464	Chimney Lakes Elem.	6:45pm	Ambassador Speaker	No

	А	В	С	D	Е	F
38	4/11/2017	National Assoc. of Women in Science	UNF	7pm	Ambassador Speaker	Yes
39	4/14/2017	Girl Scout Troop 1464	Main St Lab Tour	11am	Ambassador Facility Tour	No
40	4/17/2017					
41	4/17/2017	Confederate Point Civic Assoc.	5961 Swamp Fox Rd.	7pm	Ambassador Speaker	No
42	4/18/2017	Deutsche Bank	5022 Gate Parkway	12pm	Ambassador Speaker	No
43	4/22/2017	Fair Housing for House Seekers Conference	Main Library	9am	Ambassador Event	Yes
44	4/22 - 23/2017	Garden & Arts Fest	Jax Zoo	9am	Ambassador Event	Yes
45	4/22/2017	Earth Day at the Landing	Jax Landing	11am	Ambassador Event	Yes
46	4/25/2017	Yulee Primary School STEM Night	86426 Goodbread Rd.	6pm	Ambassador Event	Yes
47	4/25/2017	Jacksonville IT Council	FSCJ Downtown Campus	7:30am	Ambassador Speaker	Yes
48	4/29/2017	CARE Expo	Jax Fairgrounds	10am	Ambassador Event	Yes
49	4/29/2017	Butterfly Festival	Tree Hill Nature Center	10am	Ambassador Event	Yes
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56	May-17					
57	5/10/2017	Chaffee Trail Elem. Career Fair	11400 Sam Caruso Way	8:30am	Ambassador Event	No
58	5/10/2017	Biscayne Elem. Career Fair	12230 Biscayne Blvd.	9am	Ambassador Event	No
59	5/12/2017	Mental Health Conference	Edward Waters College	9:30am	Ambassador Event	Yes
60	5/12/2017	Chimney Lakes Elem. Career Fair	9353 Staples Mill Dr.	9:30am	Ambassador Speaker	No
61	5/18/2017	Arlington Heights STEM Night	1520 Sprinkle Dr.	6pm	Ambassador Event	Yes

	A	В	С	D	E	F
62	5/19/2017	Rufus E Payne Elem Career Dfay	6725 Hema St	8:30am	Ambassador Event	No
63	5/20/2017	FL STEM Expo	River City Science Academy	11am - 3pm	Ambassador Event	Yes
64	5/22 - 23/2017	Gardens & Arts Festival	Jax Zoo	10am - 4pm	Ambassador Event	Yes
65	5/25/2017	Bartram Springs Career Fair	14799 Batram Parkway	8:30am	Ambassador Event	No
66						
67	Jun-17					
68	6/16/2017	Men's Health Fair	Lincoln Villas Senior Center	10am	Ambassador Event	Yes
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April 3, 2017

SUBJECT:	JEA FY2016 ANNUAL DISC	CLOSURE REPORTS					
Purpose:	☐ Information Only	□ Action Required	Advice/Direction				
<b>Issue:</b> JEA staff is requesting an authorization and approval of the filing and use of the Annual Disclosure Reports for each of the (i) Electric Utility System and (ii) Water and Sewer System and District Energy System (together, the "Systems") for the fiscal year ended September 30, 2016, in order to comply with JEA's continuing disclosure undertakings for its bonds and various bank credit agreements.							
	High. JEA is responsible for the federal securities laws p		osure Reports and is subject to g information in its disclosure				
	ill the Board's responsibility un JEA's disclosure documents.	nder federal securities laws pro	phibiting false and misleading				
JEA's continuir	<b>Cost or Benefit:</b> Filing of the Annual Disclosure Reports facilitates disclosure to the marketplace to meet JEA's continuing disclosure obligations to current holders of JEA's debt. The Annual Disclosure Reports are also used to provide information about JEA to potential buyers of JEA's Systems' bonds.						
Disclosure Rep	ed Board action: Staff recommonts for the Systems in substanges as are approved by the Milling and use of the Annual Dis	antially the forms provided to the languing Director and Chief Ex	he Board on March 21, 2017,				
For additional information, contact: Melissa Dykes, 665-7054							
Submitted by: PEI	M/ MHD/ JEO/ RLH						



### **Commitments to Action**





### **INTER-OFFICE MEMORANDUM**

April 3, 2017

SUBJECT: JEA FY2016 ANNUAL DISCLOSURE REPORTS

FROM: Paul E. McElroy, Managing Director/CEO

**TO:** JEA Board of Directors

### **BACKGROUND:**

Each year, JEA files with the Municipal Securities Rulemaking Board (the "MSRB") through the Electronic Municipal Market Access ("EMMA") website Annual Disclosure Reports in compliance with JEA's continuing disclosure undertakings for certain of its bonds and various credit agreements. EMMA is the "central electronic post office" recognized by the United States Securities and Exchange Commission ("SEC") as the single national depository for continuing disclosure information that is required to be prepared and disseminated by issuers of municipal securities. Annual Disclosure Reports have been prepared for the Electric Utility System and separately for the Water and Sewer System and District Energy System, (together, the "Systems"), and will be incorporated by reference in official statements and reoffering memoranda subsequently used by JEA for its respective Systems' bond offerings and reofferings.

JEA is responsible for the content of the Annual Disclosure Reports and is subject to the provisions of the federal securities laws prohibiting false and misleading information in its disclosure documents. The antifraud provisions of the federal securities laws govern Board Member disclosure responsibilities. The requirements of the federal securities laws essentially require that disclosure documents of issuers such as JEA not contain an "untrue statement of a material fact" or omit to state a "material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading." "Materiality" under the federal securities laws means whether there is a substantial likelihood that a reasonable investor would consider the facts at issue to be important to an investment decision.

Public officials (including Board Members) who have the ultimate responsibility to approve the issuance of debt securities and related disclosure documents have a duty under the federal securities laws and may not authorize disclosure he or she knows to be false or misleading or while recklessly disregarding facts that indicate there is a risk that the disclosure may be misleading. The SEC has stated that Board Members may reasonably rely on the work of governmental employees in the disclosure context. Nothing in the SEC's position mandates that a Board Member needs to read each page of every disclosure document before approving it. Reasonable reliance can be established when the Board Member:

- is satisfied that the disclosure process is reasonably designed to produce accurate and reliable information:
- has a reasonable basis to have confidence in the integrity and competence of the staff and financing team; and
- does not know of anything that would cause such Board Member to question the accuracy of the
  disclosures or that would indicate that they are misleading or know of any potentially material
  issues that should be brought to the attention of staff and the financing team for further
  explanation.

In accordance with existing practices, each Annual Disclosure Report presented for Board approval has been prepared by staff with the assistance of JEA's outside bond counsel in a manner which we believe is reasonably designed to produce disclosure documents meeting the requirements of the federal securities laws.

### **DISCUSSION:**

Each Annual Disclosure Report prepared for the Systems, as referred to above, contains updated disclosure information regarding each of JEA's Systems and its respective most recently completed fiscal year and will be used (a) to provide that information to all participants in the municipal securities market regarding JEA's outstanding debt and (b) as a basis for the disclosure information regarding JEA that is required to be given by JEA in connection with its issuances from time to time of refunding or additional debt. Among other things, the Annual Disclosure Reports contain JEA's audited financial statements for its fiscal year ended September 30, 2016, as Appendix A thereto. Official Statements and reoffering memoranda prepared by JEA in connection with its respective Systems' debt offerings and reofferings, subsequent to the date of the Annual Disclosure Reports for the Systems, incorporate by reference the relevant disclosure information contained in the respective Annual Disclosure Report and, if necessary, contain a "recent developments" section with respect to material changes in JEA's business and condition that have occurred after the date of the respective Annual Disclosure Report.

The Annual Disclosure Reports for the (i) Electric Utility System and (ii) Water and Sewer System and District Energy System for the fiscal year ended September 30, 2016, are expected to be filed with EMMA on or around April 18, 2017. Drafts of the Annual Disclosure Reports for the Systems were distributed to Members on March 21, 2017. Changes from the March 21st draft are included with this item. Subsequent changes, if any, will be distributed at the Board's April 18th meeting.

All documents have been reviewed by the Office of General Counsel.

### **RECOMMENDATION:**

Staff recommends that the Board (i) approve and authorize the Annual Disclosure Reports for the Systems in substantially the forms distributed to Members on March 21, 2017, with additional changes as are approved by the Managing Director and Chief Executive Officer of JEA and (ii) authorize the filing and use of the Annual Disclosure Reports as described above.

Paul E. McElroy, Managing Director/CEO

PEM/MHD/JEO/RLH

### April 3, 2017

Drafts of the (i) Annual Disclosure Report for Electric Utility System for Fiscal Year Ended September 30, 2016 and (ii) Annual Disclosure Report for Water and Sewer System and District Energy System for Fiscal Year ended September 30, 2016 were delivered to Board Members for review on March 21, 2017, and are not included in the monthly Board packages being distributed.

These reports are available for review upon request. Please contact Melissa Charleroy, Executive Assistant, at (904) 665-7313 if additional information is needed.



# ANNUAL DISCLOSURE REPORT FOR WATER AND SEWER SYSTEM AND DISTRICT ENERGY SYSTEM FOR FISCAL YEAR ENDED SEPTEMBER 30, 2016

(Prepared pursuant to certain continuing disclosure undertakings relating to the Bonds listed in APPENDIX E hereto)

Filed with EMMA

Dated as of

April \_\_\_\_\_, 2017

### JEA 21 W. CHURCH STREET JACKSONVILLE, FLORIDA 32202 (904) 665-7410

(http://www.jea.com)

### JEA OFFICIALS

### **BOARD MEMBERSHIP**

Chair

Chair

Fetway III]Burr

Vice Chair

Fedward E.

Petway III]Burr

Fedward E.

Petway III]Burr

Fedward E.

Petway III]Burr

Frederick D. Newbill

Thomas F. Petway III

#### **MANAGEMENT**

Managing Director and Chief Executive Officer Paul E. McElroy Vice President / General Manager, Electric Systems Michael J. Brost Vice President / General Manager, Water / Wastewater Systems Brian J. Roche Chief Financial Officer Melissa H. Dykes **Chief Compliance Officer** Ted E. Hobson Chief Customer Officer Vacant Chief Human Resources Officer Angelia R. Hiers **Chief Information Officer** Paul J. Cosgrave Chief Legal Officer Jody L. Brooks Chief Public Affairs Officer Michael R. Hightower Treasurer Joseph E. Orfano

### GENERAL COUNSEL

Jason R. Gabriel, Esq. General Counsel of the City of Jacksonville Jacksonville, Florida

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# ANNUAL DISCLOSURE REPORT FOR WATER AND SEWER SYSTEM AND DISTRICT ENERGY SYSTEM FOR FISCAL YEAR ENDED SEPTEMBER 30, 2016

### INTRODUCTION

#### General

This Annual Disclosure Report for Water and Sewer System and District Energy System for Fiscal Year Ended September 30, 2016 (together with the Schedule and the Appendices hereto, this "Annual Disclosure Report") is furnished by JEA to provide information concerning (a) JEA, (b) JEA's combined water and sewer utilities system, (c) JEA's local district energy facilities, (d) outstanding debt of JEA relating to the combined water and sewer utilities system, and (e) outstanding debt of JEA relating to the local district energy facilities. This Annual Disclosure Report is being filed with the Municipal Securities Rulemaking Board (the "MSRB"), through the MSRB's Electronic Municipal Market Access ("EMMA") website currently located at <a href="http://emma.msrb.org">http://emma.msrb.org</a> pursuant to certain continuing disclosure undertakings made by JEA in accordance with the provisions of Rule 15c2-12, as amended ("Rule 15c2-12"), promulgated by the United States Securities and Exchange Commission (the "SEC") pursuant to the Securities Exchange Act of 1934, as amended. The bonds to which such continuing disclosure undertakings relate (including the CUSIP numbers thereof) are listed in APPENDIX E hereto. As permitted by the provisions of Rule 15c2-12, this Annual Disclosure Report also is intended to be included by reference in official statements and other offering and remarketing documents prepared by JEA in connection with (a) the sale and issuance, after the date hereof, of certain securities of JEA and (b) the remarketing in the secondary market, after the date hereof, of certain securities of JEA.

JEA is a body politic and corporate organized and existing under the laws of the State of Florida and is an independent agency of the City of Jacksonville, Florida (the "City"). The City is a consolidated city-county local government for Duval County, located in Northeast Florida. The governing body of JEA (the "JEA Board") consists of seven members appointed by the Mayor of the City and confirmed by the City Council of the City (the "Council"). JEA (then known as Jacksonville Electric Authority) was established in 1968 to own and manage the electric utility which had been owned by the City since 1895 (the "Electric System"). In 1997, the Council amended the Charter of the City (the "Charter") in order to authorize JEA to own and operate additional utility functions and, effective on June 1, 1997, the City transferred to JEA the City's combined water and sewer utilities system (the "Water and Sewer System"). Effective as of October 1, 2004, JEA established a separate utility system (the "District Energy System") for its local district energy facilities, including its chilled water activities and any local district heating facilities JEA may develop in the future. JEA operates and maintains its records on the basis of a fiscal year ending on each September 30th (a "Fiscal Year").

Each of the Electric System, the Water and Sewer System and the District Energy System is owned and operated by JEA separately. For information relating to JEA's Electric System see

"ANNUAL DISCLOSURE REPORT FOR ELECTRIC UTILITY SYSTEM FOR FISCAL YEAR ENDED SEPTEMBER 30, 2016" (the "Electric ADR") available from the Municipal Securities Rulemaking Board's Electronic Municipal Market Access (EMMA) website at <a href="http://emma.msrb.org">http://emma.msrb.org</a>. The revenues of each system do not constitute revenues of the other two systems, and, except as described under "WATER AND SEWER SYSTEM - FINANCIAL INFORMATION RELATING TO WATER AND SEWER SYSTEM - Debt Relating to Water and Sewer System - Water and Sewer System Support of the District Energy System Bonds" herein, revenues of each system are not pledged to the payment of any debt issued or to be issued by JEA to finance and refinance the other two systems. JEA may, however, satisfy its annual obligation to transfer funds to the City with funds derived from any of its utilities systems. See "OTHER FINANCIAL INFORMATION - Transfers to the City" herein.

This Annual Disclosure Report contains information regarding JEA's Water and Sewer System and the District Energy System. For financing purposes and except as described under "WATER AND SEWER SYSTEM - FINANCIAL INFORMATION RELATING TO WATER AND SEWER SYSTEM -Debt Relating to Water and Sewer System - Water and Sewer System Support of the District Energy System Bonds" herein, the debt of JEA relating to the Water and Sewer System is payable from and secured by the revenues derived by the Water and Sewer System from the sale of water and the provision of sewer treatment and related services. The debt of JEA relating to the District Energy System is payable from and secured by the revenues derived from JEA's chilled water activities and any local district heating facilities JEA may develop in the future. Accordingly, (a) except as described under "WATER AND SEWER SYSTEM - FINANCIAL INFORMATION RELATING TO WATER AND SEWER SYSTEM - Debt Relating to Water and Sewer System - Water and Sewer System Support of the District Energy System Bonds" herein, the information contained herein relating to the Water and Sewer System is not relevant to the Electric System Bonds, the Subordinated Electric System Bonds or the District Energy System Bonds and should not be taken into account in evaluating such debt; and (b) the information contained herein relating to the District Energy System is not relevant to the Electric System Bonds, Subordinated Electric System Bonds, Water and Sewer System Bonds or Subordinated Water and Sewer System Bonds and should not be taken into account in evaluating such debt.

The summaries of or references to the Water and Sewer System Resolution, the Subordinated Water and Sewer System Resolution and the District Energy System Resolution, and certain proposed amendments thereto, where applicable, (as such terms are hereinafter defined) and certain statutes and other ordinances and documents included in this Annual Disclosure Report do not purport to be comprehensive or definitive; and such summaries and references are qualified in their entirety by references to each such resolution, statute, ordinance, and document. Copies of the Water and Sewer System Resolution, the Subordinated Water and Sewer Resolution and the District Energy System website Resolution are available on the **JEA** https://www.jea.com/About/Investor Relations/Bonds.aspx and the other documents referred to in this Annual Disclosure Report may be obtained from JEA; provided that a reasonable charge may be imposed for the cost of reproduction.

### JEA Establishment and Organization

JEA was established in 1968 to own and manage the electric utility which had been owned by the City since 1895. The City's Charter was amended in 1997 to authorize JEA to own and operate other utility systems, including the Water and Sewer System. In 2004, the City authorized JEA to create the District Energy System. The JEA Board consists of seven members appointed by the Mayor of the City, subject to confirmation by the Council. The members serve without pay for staggered terms of four years each, with a maximum of two consecutive full terms each.

Current members of the JEA Board, their occupations and the commencement and expiration of their terms are as follows:

<u>MEMBER</u>	<u>OCCUPATION</u>	<u>TERM</u>
Thomas F. Petway I Chair	II Founder and Member of the Board of Directors  US Assure, Inc.	October 28, 2015 February 28, 2018
	Ob Assure, me.	
Edward E. Burr <del>Vice</del> -Chair	President & CEO GreenPointe Holdings, LLC	November 25, 2015 — February 28, 2021]
G. Alan Howard Vice Chair	Founder & President Milam Howard Nicandri Dees and Gillam, P.A.	February 10, 2016 - February 28, 2019
Delores P. Kesler Secretary	Chairman & CEO Adium, LLC	October 28, 2015 - February 28, 2020
Husein A. Cumber	Executive Vice President for Corporate Developmer Florida East Coast Industries, Inc.	nt February 28, 2014 - February 28, 2018
Kelly Flanagan	Senior Vice President & CFO Jacksonville Jaguars, LLC	November 25, 2015 - February 28, 2020
G. Alan Howard	Founder & President Milam Howard Nicandri Dees and Gillam, P.A.	February 10, 2016 - February 28, 2019
Frederick D. Newbill	Pastor, First Timothy Baptist Church	January 12, 2017 - February 28, 2019
Thomas F. Petway III	Founder and Member of the Board of Directors US Assure, Inc.	October 28, 2015 - February 28, 2018

In addition, in accordance with the provisions of the interlocal agreement entered into between JEA and Nassau County, Florida in connection with JEA's acquisition of certain assets and franchises of a private water and sewer utility in Nassau County, Nassau County is entitled to appoint a non-voting representative to the JEA Board. The Nassau County representative is entitled to attend all JEA Board meetings and to participate in discussions concerning matters that affect the provision of water and sewer services within Nassau County. Nassau County has appointed Mike Mullin, a Commissioner on Nassau County's Board of County Commissioners, as its representative to the JEA Board.

The Charter authorizes JEA to construct, acquire (including acquisition by condemnation), establish, improve, extend, enlarge, maintain, repair, finance, manage, operate and promote its utilities systems (which consist of (1) the Electric System, (2) the Water and Sewer System, (3) the District Energy System and (4) any additional utilities systems which JEA may undertake in the future upon satisfaction of the conditions set forth in the Charter), and to furnish electricity, water, sanitary sewer service, natural gas and other utility services as authorized therein within and outside of the City and for said purposes to construct and maintain electric lines, pipelines, water and sewer mains, natural gas lines and related facilities along all public highways and streets within and outside of the City. Should any additional utility system be undertaken by JEA in the future, such utility system may, at the option of JEA, constitute an additional utility function added to, and may become a part of, the Water and Sewer System or the District Energy System. See "SUMMARY OF CERTAIN PROVISIONS OF THE WATER AND SEWER SYSTEM RESOLUTION - Certain Other Covenants - Additional Utility Functions" in APPENDIX B attached hereto. The Charter also confers upon JEA the power to sue, to enter into contracts, agreements and leases, and to sell revenue bonds to finance capital improvements and to refund previously issued evidences of indebtedness of JEA.

### **Management and Employees**

The Charter assigns responsibility for the management of JEA's utilities systems to the JEA Board. JEA employs a Managing Director and Chief Executive Officer as its chief executive officer. The Managing Director, executive officers, vice presidents, directors, managers, executive assistants and other appointed staff, numbering approximately 380 persons, form the management team (the "Management Team") and are not subject to the City's civil service system.

### Management

The Managing Director and Chief Executive Officer of JEA and the nine executive officers of JEA are:

*Paul E. McElroy, Managing Director and Chief Executive Officer.* The JEA Board of Directors named Mr. McElroy the company's seventh Chief Executive Officer effective October 1, 2012. From January 1, 2006 to October 1, 2012, he served as JEA's Chief Financial Officer. Prior to that, he served as JEA's Vice President, Financial Services.

Mr. McElroy currently serves on the boards of the University of North Florida, The Energy Authority, Inc. ("TEA"), Florida Reliability Coordinating Council, Northeast Florida Safety Council, Inc., and the Jacksonville Chamber of Commerce. Mr. McElroy is a member of the American Public Power Association Board's Executive Committee and serves as Treasurer, as well as Chair of the Finance and Audit Committee and Chair of the Retirement Committee. He is also a member of the Large Public Power Council CEO Roundtable.

Mr. McElroy holds a Bachelor of Science in accounting from St. Joseph's College in Rensselaer, Indiana and a certificate from the Advanced Management Program of the Wharton School of the University of Pennsylvania and pursued graduate level studies at the University of Bridgeport and the University of New Haven in Connecticut.

Before joining JEA, Mr. McElroy served as a Vice President and General Manager for Bombardier Capital Corporation in Jacksonville, Florida and Colchester, Vermont. Prior to that, he served in a variety of management positions with Pitney Bowes Credit Corporation, including Controller, Director - Marketing and Vice President, Internal Finance Division in Norwalk, Connecticut.

Michael J. Brost, Vice President / General Manager, Electric Systems. Mr. Brost has lead responsibility for producing and delivering electricity to JEA's 450,000 electric customers in a safe, reliable and cost-competitive manner, and in full compliance with regulatory objectives. In this role, Mr. Brost and his team are responsible for planning, constructing, operating and maintaining JEA's electric system—the generation plants and the transmission, substations and distribution systems.

Mr. Brost joined JEA in 1983 as an electrical engineer in System Operations. In 1993, he was appointed Division Chief of Distribution Engineering and was soon promoted to Vice President of the Distribution Group. He was a founding member of JEA's Corporate Strategy Team and has held vice president positions in the areas of Organizational Development and Organizational Services. He also served as the President and CEO at Colectric Partners in 2007 and 2008. Mr. Brost is a licensed Professional Engineer in the State of Florida. He has an M.S. degree in Engineering and an MBA. He also serves on several local nonprofit boards.

**Brian J. Roche, Vice President / General Manager, Water / Wastewater Systems**. Mr. Roche is responsible for the planning, engineering, construction, operation and maintenance of JEA's Water, Wastewater, Reclaimed Water and District Energy systems in a safe, reliable and cost-competitive manner, and in full compliance with regulatory objectives.

Mr. Roche joined JEA in 1983 as a co-op student and has 25 years' experience at JEA in roles across the organization including serving as a project engineer for electric generating stations, an account executive for industrial customers, a wastewater planner, the Director of Meter, Billing and Collections, and as the Director of Financial Planning, Budgets and Rates. In addition, he has experience in the private sector, including roles as a project engineer for Amoco Oil Company and with a global environmental engineering consultant firm. Mr. Roche presently serves on the Board of Directors of Vystar Credit Union. Mr. Roche holds a bachelor degree in Mechanical Engineering from Georgia Institute of Technology, a bachelor of science degree in Accounting from the University of Florida, an MBA and a master's degree of Accountancy from the University of North Florida. Mr. Roche is a licensed Professional Engineer in the State of Florida and is a Certified Public Accountant.

*Melissa H. Dykes, Chief Financial Officer*. Ms. Dykes has served as Chief Financial Officer since March 2013. She provides leadership to ensure the long-term financial health of JEA, resulting in access to capital at low cost for JEA's customers. She is responsible for all aspects of JEA's finances, including treasury, financial reporting, financial planning and analysis, and budgeting, as well as corporate strategy, supply chain management and shared services. She has lead responsibility for ensuring compliance with all reporting, regulatory and tax requirements for JEA.

Ms. Dykes currently serves on the Finance and Audit Committee of TEA.

Prior to joining JEA, Ms. Dykes was CFO at a portfolio company of a large energy private equity firm and a principal in a renewable energy development company, where she was responsible for origination, commercial structuring, development, and capital raising for renewable energy projects. She also was Vice President of Investment Banking at JPMorgan. While at JPMorgan, Ms. Dykes was responsible for providing capital solutions for clients, including over \$26 billion in financings for many municipal electric and water systems across the country, risk management product delivery, and mergers and acquisitions. Prior to joining JPMorgan, Ms. Dykes worked for The World Bank Group where she researched and published on private participation in infrastructure industries in developing countries. Ms. Dykes is a graduate of the University of Florida and holds a certificate in Advanced Management from Dartmouth College.

Ted E. Hobson, Chief Compliance Officer. Mr. Hobson joined JEA in 1973 and has overall responsibility for development, implementation and maintenance of JEA's Compliance Programs including NERC Electrical Standards, NERC Critical Infrastructure Protection (CIP) standards, FACTA regulations and other related federal and state regulations. He is also responsible for JEA's physical security department as well as Audit Services and Enterprise Risk Management. Mr. Hobson served on the Board of Directors of TEA from the founding of TEA in 1997 until restructuring in 2011 and is currently JEA's representative on the Settlement and Operating Committee. Mr. Hobson is JEA's alternate board member for the Florida Electric Reliability Coordinating Council (FRCC).

Mr. Hobson's previous position was Director of Energy Delivery, where he was responsible for all electric field activities including overhead and underground line work, system protection and controls, substation maintenance and the 24-hour operation of the JEA power system including generation commitment and dispatch, transmission operation and security and interchange services with other utilities. During his over 40 years with JEA, he has worked in the areas of distribution, engineering, trouble dispatching, system operations and system planning. Mr. Hobson has served as JEA's representative to the Florida Reliability Coordinating Council (FRCC) for over 15 years, is an alternate Board Member and was chair of the Operating Committee for the past six years. He also served on various North American Electric Reliability Corporation (NERC) committees and

subcommittees and is a member and past chair of the NERC Compliance and Certification Committee.

Mr. Hobson holds a BSEE from the University of Florida, and is a registered Professional Engineer in the State of Florida.

### The position of Chief Customer Officer is currently vacant.

Angelia R. Hiers, Chief Human Resources Officer. Ms. Hiers is a career human resource professional, with industry knowledge and experience at strategic and tactical levels, in all aspects of human resources and organizational development. During her career, she has been responsible for employee and labor relations, compensation, benefits, recruiting, training and development, safety and wellness, diversity and inclusion. Throughout her career, Ms. Hiers has leveraged her collaborative, energetic and creative style to build successful human resource strategies and business solutions.

Prior to joining JEA, Ms. Hiers was the Vice President, Human Resources for Baker Distributing Company, a subsidiary of the publicly traded company, Watsco, Inc. She also served as Human Resources Director for CSX Technology and Senior Vice President/Managing Director, Right Management Consultants in Jacksonville, Florida. Prior to joining Right Management Consultants, Ms. Hiers held leadership positions in operations and human resources for Barnett Bank.

Ms. Hiers is a graduate of Edward Waters College with a Bachelor of Arts - Organizational Management and Jacksonville University with a Master of Business Administration.

**Paul J. Cosgrave, Chief Information Officer**. Mr. Cosgrave brings to JEA 40+ years of line management and IT consulting/systems integration experience. He retired in 2010 from the City of New York (NYC) as Commissioner for the Department of Information Technology and Telecommunications and as the Chief Information Officer (CIO) for NYC. At that time he became a Senior Fellow at the Center for Digital Government and resumed operating his own consulting firm, Startegies4Success. His areas of research and expertise are IT strategic planning, IT portfolio management, IT governance and IT consolidation/cost reduction at all levels of government.

Previously, Mr. Cosgrave served as the CIO at the Internal Revenue Service during a major turnaround period (1998-2001), and before that he spent 25 years in private industry, having worked as CEO for the Claremont Technology Group, a company he took public in 1996 and as a Managing Partner at Andersen Consulting (now Accenture) where he worked for 19 years. He has served as Executive Board member for the Information Technology Association of America (now TechAmerica) and has served on the Board of Directors for three separate public IT services companies (Cognizant, Claremont Technology, and Technology Solutions). He has served on four not-for-profit Boards of Directors, including the Rensselaer Alumni Association where he recently completed his two-year term as president.

Mr. Cosgrave earned a BS and MS in Industrial Engineering from the Rensselaer Polytechnic Institute (RPI). He has been recognized by RPI with the Distinguished Albert Fox Demers Medal, the second highest recognition given to an alumnus, and by his fraternity, Sigma Chi, as a Significant Sig, an honor bestowed on a few alumni who have distinguished themselves in their careers. He has also been recognized by Computerworld, Information Week and Government Technology for his innovative leadership and accomplishments in the IT industry.

Jody L. Brooks, Chief Legal Officer. Jody Brooks joined JEA as Chief Legal Officer via an agreement with the City of Jacksonville Office of General Counsel in August 2016. Ms. Brooks had

been rendering legal support and guidance to JEA while providing legal services to many other City departments. As the newly appointed JEA Chief Legal Officer, Ms. Brooks is fully dedicated to serving as the chief legal advisor to JEA and the JEA Board of Directors.

Ms. Brooks joined the Office of General Counsel in April 2013 and was subsequently promoted in 2015 to Chief, Government Operations Department. Prior to joining the Office of General Counsel, she held in house counsel positions with both The St. Joe Company and Allen Land Group handling real estate transactions, land use development and environmental matters. Earlier in her career, she worked as an associate at Lewis, Longman & Walker, P.A., where she represented property owners and government entities in federal, state and local government environmental, land use, zoning and condemnation matters.

She received a Bachelor of Science degree with honors from the Jacksonville University Davis College of Business and her Juris Doctor degree with honors and a Certificate in Environmental and Land Use Law from the University of Florida, Fredric G. Levin College of Law.

*Michael R. Hightower, Chief Public Affairs Officer*. Mr. Hightower joined JEA in 2015, bringing over 35 years of governmental and legislative relations experience. He also previously served 16 years on JEA's Board of Directors including two two-year terms as JEA Chair.

Mr. Hightower joined Blue Cross and Blue Shield of Florida (now Florida Blue) in 1981 as the Director of Governmental and Legislative Relations and in 1985 was named its Vice President of Governmental and Legislative Relations. He worked closely with key political leaders in the federal, state and local government and, after three decades of a successful career at Florida Blue, retired in late 2014. He then joined the international law firm of Holland & Knight LLP as a Senior Policy Advisor before joining the JEA senior leadership team.

In addition to his professional accomplishments, Mr. Hightower has dedicated his time, talents and leadership to numerous boards and commissions over the last 35 years. Presently he chairs the following: the Florida Governor's Mansion Foundation and the Florida Association of Professional Lobbyists. Mr. Hightower is also the Senior Vice President, Special Projects—Florida House and Florida's embassy in Washington, D.C. He also serves as an active board member of OneJax, Florida Ounce of Prevention and Five Star Veterans Center.

Prior to joining JEA, Mr. Hightower chaired the following organizations and civic and trade associations: United States Naval Academy; Jacksonville Chamber of Commerce; Florida House, Florida's Embassy in Washington, D.C.; Associated Industries of Florida; Florida Insurance Council; Florida News Service; Florida College System Foundation; Jacksonville Library Foundation; Jacksonville Political Leadership Institute; JaxBix; Duval County Republican Party and the Cecil Field Base Closure Commission.

Throughout the state, he is well-known for his political leadership, having served as chair or finance chair for more than 580 successful local, state, and/or federal candidates since 1972. He has assisted in raising more than \$136.3 million for charitable, candidate and political party campaigns since 1981.

In 2006, Leadership Florida's leaders appointed Mr. Hightower to the Florida Energy Commission. The nine-member panel was charged with making recommendations to the Florida Legislature on ways to secure Florida's energy future.

In 2010, Florida's legislative leadership appointed Mr. Hightower to the Public Service Commission Nominating Council, charged with interviewing and recommending qualified candidates for gubernatorial appointment to the Florida Public Service Commission.

Mr. Hightower, a 1972 graduate of Jacksonville University, resides in Jacksonville. He was a third term 2003, 2005, 2007 University of Florida Graduate School adjunct instructor, "Principals of Lobbying".

## **Employees**

The employees of JEA are considered to be governmental (public) employees and, as such, have the right to organize, be represented and bargain collectively for wages, hours and terms and conditions of employment, as provided in Chapter 447, Part II, Florida Statutes. Florida state law prohibits strikes and concerted work slowdowns by governmental (public) employees. Pursuant to the Charter, JEA has full and independent authority to hire, transfer, promote, discipline, terminate and evaluate employees and, consistent with the provisions of the Charter relating to civil service, to establish employment policies relating to hiring, promotion, discipline, termination and other terms and conditions of employment, to enter into negotiations with employee organizations with respect to wages, hours and terms and conditions of employment and to take such other employment related action as needed to assure effective and efficient administration and operation of its utilities systems. The Council is the legislative body with authority to approve or not approve collective bargaining agreements and to resolve any statutory impasses that may arise from collective bargaining.

As of October 1, 2016, JEA had 2,158 budgeted employee positions (exclusive of the Power Park, as defined in the Electric ADR, employees referred to below), of which 599 were budgeted to the Water and Sewer System, five were budgeted to the District Energy System, and 1,554 were budgeted to the Electric System. Except for the Management Team and a minor number of contract employees, such employees have civil service status.

Approximately 1,704 employees are covered by five collective bargaining agreements. These employees are represented by the American Federation of State, County, and Municipal Employees ("AFSCME"), the International Brotherhood of Electrical Workers ("IBEW"), Local 2358 and the Northeast Florida Public Employees, Local 630, Laborers' International Union of North America ("LIUNA"), all of which are affiliated with the AFL-CIO, and by a professional employees' association (the "PEA," Professional Employees Association) and a supervisors' association (the "JSA," Jacksonville Supervisors Association) that have no AFL-CIO affiliation. JEA has collective bargaining agreements with all the collective bargaining agents, which expired September 30, 2016. Contract negotiations for successor agreements commenced in the second quarter of fiscal year 2016 and the parties are actively seeking resolution for three year successor agreements.

Substantially all of JEA's employees participate in the City's general employees pension plan ("GEPP"). Employees of the Power Park participate in a separate pension plan. See Note 12 to JEA's Financial Statements set forth in APPENDIX A to this Annual Disclosure Report for a discussion of certain information on the City's plan. The Actuarial Valuation and Review as of October 1, 2015 for the City's GEPP (the "October 1, 2015 Actuarial Valuation Report") is available for viewing and downloading from the City's website (<a href="www.coj.net">www.coj.net</a>) by selecting "Government," then selecting "All Departments" under "City Departments," then selecting "Retirement System" under "Finance and Administration," then selecting "Plan Valuation Statements" from the navigation tab on the left hand side and then selecting "General Employees Retirement Plan, Actuarial Valuation, Oct. 2015" under "Government Accounting Standards Board and Plan Valuation Statements."

As indicated in the October 1, 2015 Actuarial Valuation Report, the aggregate unfunded actuarial accrued liability for the GEPP decreased from \$947,344,126 for the Fiscal Year ended September 30, 2013 to \$900,236,692 for the Fiscal Year ended September 30, 2015. During such period, the funded ratio of the plan increased from 62.30 percent for the Fiscal Year ended September 30, 2013 to 65.81 percent for the Fiscal Year ended September 30, 2014 and increased to 66.80 percent for the Fiscal Year

ended September 30, 2015. At the same time, JEA's aggregate contribution to the GEPP increased from \$27,038,000 for the Fiscal Year ended September 30, 2013 to \$34,149,000 for the Fiscal Year ended September 30, 2014 and to \$40,179,000 for the Fiscal Year ended September 30, 2015. JEA has been informed by the City that the actuary for the GEPP has calculated JEA's allocated share of the unfunded actuarial accrued liability for the GEPP reported in the October 1, 2015 Actuarial Valuation Report to be \$434,790,702 of the total unfunded actuarial accrued liability of \$900,236,692, reflecting decreases of \$4,755,571 and \$10,062,615, respectively, relative to the 2014 amounts provided to JEA by the City or contained in the October 1, 2014 actuarial valuation report. Please also see Section 3, Exhibit L, page 27 of the October 1, 2015 Actuarial Valuation Report in which it is shown that the contributors (which include JEA) to the GEPP contributed \$10,351,295 less than the actuarially determined employer contributions in dollar terms for Plan Year ended September 30, 2014 and \$4,318,361 less than the actuarially determined employer contributions for Plan Year ended September 30, 2015 because actual payroll growth has been less than projections leading to a lower level of payroll throughout those years. Such a shortfall in a given year is added to the total unfunded actuarial accrued liability and a new 30-year amortization base is calculated for that year which in effect adds the shortfall to future required contributions.

In accordance with Florida law, which requires capping the payroll growth rate assumption at the rate equal to the average payroll growth rate in the plan over the preceding 10 years, the actuary lowered the payroll growth rate from 2.24 percent to 1.14 percent for the 30-year period beginning with the October 1, 2015 valuation. Also, for the October 1, 2015 valuation, the GEPP used a modified mortality improvement scale and maintained an assumed rate of return of 7.50 percent per annum. These were significant factors in the increase in JEA's contribution rate as a percentage of payroll from 33.20 percent to the 36.79 percent rate shown in the October 1, 2015 actuarial valuation report for fiscal years beginning October 1, 2015 and October 1, 2016, respectively. JEA's required aggregate contribution in its Fiscal Year 2016 budget was \$48.5 million, as approved by JEA's Board of Directors on June 16, 2015. JEA's required aggregate contribution in its Fiscal Year 2017 budget is \$54.6 million, as approved by JEA's Board of Directors on June 21, 2016. The required aggregate contribution amounts calculated for the Fiscal Year 2016 budget and the Fiscal Year 2017 budget are based on a number of assumptions, including an assumption on the level of payroll for each of such fiscal years.

JEA's actual aggregate contributions to the GEPP were approximately \$43.2 million and \$40.2 million for the Fiscal Years ended September 30, 2016 and 2015, respectively. While the amount of JEA's aggregate contributions to the GEPP increased in 2016 from the amount contributed in 2015, such contributions do not constitute a significant portion of JEA's operating expenses either in the aggregate or separately when considering the portion of such contributions attributable to the Water and Sewer System or the District Energy System as a percentage of the operating expenses of the Water and Sewer System or the District Energy System, respectively. JEA also provides a medical benefits plan that it makes available to its retirees. See Note 12, Note 14 and pages 92-97 of JEA's Financial Statements set forth in APPENDIX A to this Annual Disclosure Report for a discussion of the pension plans, "other post-employment benefit" plan and actuarial accrued liability.

The City from time to time has proposed various changes to the City's GEPP. Most of JEA's employees participate in the City's GEPP. At this time, JEA cannot predict the <u>final</u> outcome of any efforts to reform the City's GEPP. In March 2016, the governor signed into law a bill allowing local county governments to levy a pension liability surtax to fund an underfunded defined benefit retirement plan or system such as the GEPP under certain conditions, beginning with approval by a majority of the electors of the county voting in a referendum. In April, the Council authorized such a referendum, which voters in Duval County approved in August 2016. Among other conditions, a local government may only impose such a surtax if admission to defined benefits plans receiving surtax proceeds will be closed to future employees and the local government and collective bargaining units consent to requiring each member to make employee retirement contributions of at least 10 percent of salary once the plan or

system is closed. The City and JEA have entered into completed negotiations with their collective bargaining units-resulting in proposed agreements which recognize the increased employee contribution rate and closure of the GEPP defined benefit plan to new hires effective October 1, 2017. As of the date of this Annual Disclosure Report, [two of JEA's collective bargaining units (AFSCME and JSA) have ratified JEA's proposed contracts, two JEA collective bargaining units (IBEW Local 2358 and LIUNA) have tentative agreements to be voted on by union membership on March 14, 2017, and negotiations with the remaining JEA collective bargaining unit, PEA, are ongoing.] As of the date of this Annual Disclosure Report, [the City's collective bargaining units that are impacted by the GEPP have reached tentative agreements]. JEA cannot predict the timing of the conclusion or outcome of the negotiations the proposed agreements have been submitted for consideration and approval to the Council. This legislative process typically takes six to eight weeks for completion.

## **Certain Demographic Information**

Under Florida law, the City and Duval County are organized as a single, consolidated government. Based upon the 2010 United States Census, the consolidated City is the most populous city in the State of Florida. The City covers 840 square miles and is one of the largest cities in area in the United States.

The Jacksonville Metropolitan Statistical Area ("MSA") is composed of Duval, Clay, Nassau, St. Johns and Baker Counties, an area covering 3,202 square miles. The U.S. Census Bureau estimates that the Jacksonville MSA had a population of 1,449,4811,478,212 as of July 1, 2015-2016. The Jacksonville MSA is currently the fourth most populous MSA in the State of Florida. The table below shows population for the Jacksonville MSA.

	Population
<u>Year</u>	Jacksonville <u>MSA</u>
1980	722,252
1990	906,727
$2000^{(1)}$	1,122,750
2010	1,345,596
<del>2015</del> <u>2016</u>	<del>1,449,481<u>1,478,2</u></del>
	<u>12</u>

Source: United States Census Bureau

The economy of the Jacksonville MSA contains significant elements of trade and services, transportation services, manufacturing, insurance and banking and tourism. The Port of Jacksonville is one of the largest ports on the South Atlantic seaboard and in terms of tonnage ranks third in the State of Florida. A number of insurance and banking companies maintain regional offices in the City. The tourism and recreational facilities in the City include an arena, a performing arts center, a convention center, EverBank Field (which is the home field of the National Football League's Jacksonville Jaguars), a baseball park, numerous golf courses and resorts and various recreational facilities at the beaches. Two large United States Navy bases are located in the City.

The table below sets forth the annual, not seasonally adjusted, labor force, employment and unemployment figures for the Jacksonville MSA and comparative unemployment figures for the State of Florida and the United States for the most recent 10 years ended December 2016.

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<sup>(1)</sup> Baker County was included in the Jacksonville MSA starting with the 2000 United States census.

	Jacksonville MSA Labor Force		Unemploymer	it Rate (%)	
<u>Year</u>	<u>Civilian</u>	<b>Employment</b>	Unemployment <a href="Rate(%)">Rate(%)</a>	<u>Florida</u>	<u>U.S.</u>
2007	674,548	648,003	3.9	4.0	4.6
2008	687,704	646,302	6.0	6.3	5.8
2009	681,026	612,993	10.0	10.4	9.3
2010	697,120	622,208	10.7	11.1	9.6
2011	701,601	633,473	9.7	10.0	8.9
2012	704,583	646,531	8.2	8.5	8.1
2013	709,800	659,875	7.0	<del>7.3</del> <u>7.2</u>	7.4
2014	717,730 <u>7</u> 16,249	672,906 <u>671,</u> 696	6.2	6.3	6.2
2015	724,882 <u>7</u> 19,195 740.6647	686,860 <u>680,</u> 930 706,585 <u>699,</u>	<u>5.2</u> <u>5.3</u>	5.4	5.3
2016 <del>(1)</del>	34,243	<del>700,383<u>099,</u></del> <u>531</u>	<u>4.64.7</u>	4.8	4.9

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

Source: Florida Research and Economic Information Database Application, <a href="http://freida.labormarketinfo.com/default.asp">http://freida.labormarketinfo.com/default.asp</a>.

The table below shows the estimated average non-agricultural wage and salary employment by sector for the Jacksonville MSA for the calendar year 2016.

	Number of <u>Employees</u>	Percent of <u>Distribution</u>
Trade, Transportation and Utilities	<del>139,500</del> <u>137,800</u>	<del>20.8</del> <u>20.6</u>
Other Services (2)	<del>118,600</del>	<del>17.6</del>
Professional and Business Services	<del>103,900</del>	<del>15.5</del>
Education and Health Services	<del>101,600</del> <u>102,700</u>	<del>15.1</del> <u>15.4</u>
<u>Professional and Business Services</u>	<u>101,500</u>	<u>15.2</u>
Leisure and Hospitality	<u>82,900</u>	<u>12.4</u>
Government	<del>76,100</del> <u>75,300</u>	11.3
Finance	<del>64,300</del> <u>64,000</u>	9.6
Construction	<del>37,900</del> <u>38,600</u>	<del>5.6</del> <u>5.8</u>
Other Services <sup>(1)</sup>	<u>35,200</u>	<u>5.3</u>
Manufacturing	<del>30,400</del> 29,400	<u>4.5</u> 4.4
Total Non-Agricultural Employment	<del>672,300</del> 667,400	<u>100.0</u>
(Except Domestics, Self-Employed		
And Unpaid Family Workers)		

Source: United States Department of Labor.

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The following table lists the 10 largest non-governmental employers in the Jacksonville MSA and the approximate size of their respective work forces.

Name of Employer	<b>Product or Service</b>	Approximate No. of Employees
Baptist Health System	Healthcare	9,800
Bank of America / Merrill Lynch	Banking	8,000
Florida Blue	Health Insurance	6,000
Southeastern Grocers	Supermarkets	5,700
Mayo Clinic	Healthcare	5,500

<sup>(1)</sup> Preliminary: Consists of other services, information, leisure and hospitality; and natural resources and mining.

JP Morgan Chase	Banking	3,900
Citibank	Banking	3,700
CSX Transportation	Railroad	3,600
UF Health Jacksonville	Healthcare	3,600
Wells Fargo	Banking	3,500

Source: Jacksonville Regional Chamber of Commerce Research Department employer survey, fall 2012, as partially amended through December 2016.

The following table lists the eight largest governmental employers in the Jacksonville MSA and the approximate size of their respective work forces.

Name of Employer	Type of Entity/Activity	Approximate No. of Employees
Naval Air Station, Jacksonville	United States Navy	19,800
Duval County Public Schools	Public Education	11,876(1)
Naval Air Station, Mayport	United States Navy	9,000
City of Jacksonville	Municipal Government	$7,195^{(2)}$
Clay County School Board	Public Education	4,663
St. Johns County School District	Public Education	4,388(3)
Fleet Readiness Center	Maintenance / Repair Overhaul	3,850
United States Postal Service	United States Government	3,800

Source: Jacksonville Regional Chamber of Commerce Research Department employer survey, fall 2012, as partially amended through December 2016.

#### Indebtedness of JEA

The indebtedness of JEA relating to its Water and Sewer System as of the date of this Annual Disclosure Report consists of Water and Sewer System Bonds and Subordinated Water and Sewer System Bonds (as such terms are hereinafter defined) and borrowings under the Revolving Credit Facility for the account of the Water and Sewer System. See, "WATER AND SEWER SYSTEM - FINANCIAL INFORMATION RELATING TO WATER AND SEWER SYSTEM - Debt Relating to Water and Sewer System" herein. The indebtedness of JEA relating to the District Energy System currently consists of District Energy System Bonds (as such term is hereinafter defined) and borrowings outstanding under the Revolving Credit Facility for the account of the District Energy System. See "DISTRICT ENERGY SYSTEM - FINANCIAL INFORMATION RELATING TO DISTRICT ENERGY SYSTEM - Debt Relating to the District Energy System" herein. For information regarding the Revolving Credit Facility, see "OTHER FINANCIAL INFORMATION - Revolving Credit Facilities" herein. As described under "INTRODUCTION - General" herein, and except as described under "WATER AND SEWER SYSTEM - FINANCIAL INFORMATION RELATING TO WATER AND SEWER SYSTEM - Debt Relating to Water and Sewer System - Water and Sewer System Support of the District Energy System Bonds" herein, the debt of JEA relating to its Electric System, the debt of JEA relating to the Water and Sewer System and the debt of JEA relating to the District Energy System are payable from and secured by separate revenue sources. Accordingly, (a) except as described under "WATER AND SEWER SYSTEM - FINANCIAL INFORMATION RELATING TO WATER AND SEWER SYSTEM - Debt Relating to Water and Sewer System - Water and Sewer System Support of the District Energy System Bonds" herein, the information contained in this Annual Disclosure Report relating to JEA's Water and Sewer System is not relevant to the Electric System Bonds (as described in the Electric ADR), the Subordinated Electric System Bonds (as described in the Electric ADR), Power Park Issue Two Bonds (as described in the Electric ADR),

<sup>(1)</sup> Duval County Public Schools website, full-time staff (http://www.duvalschools.org/domain/5268)

<sup>(2)</sup> City of Jacksonville Annual Budget 2016-17 (http://www.coj.net/departments/finance/docs/budget/fy-16-17-annual-budget.aspx).

<sup>(3)</sup> St. Johns County School District website (http://www.stjohns.k12.fl.us/about/)

Power Park Issue Three Bonds (as described in the Electric ADR), Additional Bulk Power Supply System Bonds (as described in the Electric ADR) or the District Energy System Bonds and should not be taken into account in evaluating such debt; and (b) the information contained in this Annual Disclosure Report relating to the District Energy System is not relevant to the Electric System Bonds, the Subordinated Electric System Bonds, the Power Park Issue Two Bonds, the Power Park Issue Three Bonds, the Additional Bulk Power Supply System Bonds, the Water and Sewer System Bonds or the Subordinated Water and Sewer System Bonds.

The description of the debt of JEA contained herein and of the documents authorizing, securing and relating to such debt do not purport to be comprehensive or definitive. All references herein to such documents are qualified in their entirety by reference to such documents.

For a detailed description of the outstanding debt of JEA as of September 30, 2016, see Note 8 to the financial statements of JEA set forth in APPENDIX A attached hereto.

#### Forward-Looking Statements and Associated Risks

This Annual Disclosure Report contains forward-looking statements, including statements regarding, among other items, (a) anticipated trends in JEA's business and (b) JEA's future capital requirements and capital resources. These forward-looking statements are based on, among other things, JEA's expectations and are subject to a number of risks and uncertainties, certain of which are beyond JEA's control. Actual results could differ materially from those anticipated by these forward-looking statements. In light of these risks and uncertainties, there can be no assurance that events anticipated by the forward-looking statements contained in this Annual Disclosure Report will in fact transpire.

JEA's independent certified public accountants have not examined, compiled or otherwise applied procedures to the forward-looking statements or financial forecasts presented herein and, accordingly, do not express an opinion or any other form of assurance on such forward-looking statements or financial forecasts.

#### WATER AND SEWER SYSTEM

#### **WATER AND SEWER SYSTEM FUNCTIONS**

#### General

The Water and Sewer System consists of (a) facilities for the provision of potable water (hereinafter referred to as the "Water System"), (b) facilities for the collection and treatment of wastewater (hereinafter referred to as the "Sewer System") and (c) facilities for the treatment and distribution of reclaimed water (herein referred to as the "Reclaimed Water System"). The Water and Sewer System provides water and sewer service within the urban and suburban areas of the City, other than certain excluded areas described below. The Water and Sewer System's service territory extends into St. Johns County, which is southeast of the City, and Nassau County, which is north of the City, and also serves a number of customers in Clay County, which is southwest of the City. It is JEA's policy to serve any customer requesting service within its urban and suburban service area. Investor-owned utilities must file a petition with the Public Service Commission in order to provide water or wastewater service within the City, and JEA would object to any petition for expansion of investor-owned utility service areas unless it otherwise determines that it would be in JEA's interest not to do so.

The Water System, which served an average of 333,139 customer accounts and 7,498 reuse water customers, respectively, in the Fiscal Year ended September 30, 2016, currently is composed of 37 water treatment plants and two repump facilities, 134 active water supply wells, approximately 4,449 miles of water distribution mains and water storage capacity of 74 million gallons (including the repump

facilities). The overall peak capacity of the Water System is approximately 304 million gallons per day ("mgd"), and the Water System experienced an average daily flow of approximately 111 mgd and a maximum daily flow of approximately 154 mgd during the Fiscal Year ended September 30, 2016. Water supply is from the Floridan Aquifer, one of the most productive aquifers in the world, which provides high quality water. Total Water System sales revenues (including water capacity fees) during the Fiscal Year ended September 30, 2016 were approximately \$178,700,000 (see "WATER AND SEWER SYSTEM - FINANCIAL INFORMATION RELATING TO WATER AND SEWER SYSTEM - Schedules of Debt Service Coverage" herein).

The Sewer System, which served an average of 257,719 customer accounts in the Fiscal Year ended September 30, 2016, currently is composed of 11 wastewater treatment plants that have a rated average daily treatment capacity of approximately 120 mgd and a maximum daily flow capacity of approximately 241 mgd, approximately 1,371 pumping stations, approximately 790 low pressure sewer units and approximately 3,898 miles of gravity sewers and force mains. The Sewer System experienced an average daily flow of approximately 78 mgd and a non-coincident maximum daily flow of approximately 147 mgd during the Fiscal Year ended September 30, 2016. Total Sewer System sales revenues (including sewer capacity fees) during the Fiscal Year ended September 30, 2016 were approximately \$262,789,000 (see "WATER AND SEWER SYSTEM - FINANCIAL INFORMATION RELATING TO WATER AND SEWER SYSTEM - Schedules of Debt Service Coverage" herein).

Since the transfer of the Water and Sewer System from the City to JEA in 1997, JEA has acquired the assets and customers of seven privately-owned water and sewer companies and one governmentally-owned water and sewer utility. From time to time, JEA may explore other potential acquisition opportunities but presently has no plans to do so.

Pursuant to a 30-year interlocal agreement with St. Johns County, JEA made an up-front payment in December 2001 to St. Johns County in the amount of the net present value of five percent of JEA's projected gross revenues from the retail sale of water and wastewater (excluding reclaimed water) which JEA expected to realize in providing such services for the next 10 years in St. Johns County, calculated to be \$3,616,576. Under the terms of the interlocal agreement, subsequent utilities were purchased under the interlocal agreement and St. Johns County granted JEA the right to: 1) provide water and wastewater service to those customers in an acquired franchise area within St. Johns County, 2) provide water and wastewater service to additional areas in St. Johns County not currently served by either the St. Johns County Water and Sewer Department or other water and wastewater utilities and 3) acquire, in JEA's sole discretion, other private utilities in northern St. Johns County. Under the original terms of the interlocal agreement, at the end of each 10-year anniversary of this 30-year interlocal agreement with St. Johns County, JEA will calculate a "true-up" to adjust for the net present value of the actual retail revenues realized if the revenues exceed the projected revenues during the 10-year period. Additionally, after the 10-year and 20-year anniversaries of the agreement, JEA agrees to pay St. Johns County the net present value of five percent of the projected water and wastewater retail revenues that JEA expects to receive for the ensuing 10-year period. Based on this methodology, JEA paid St. Johns County \$12,176,152 on January 11, 2012 for both components related to the first 10-year anniversary. As discussed in Note 16 to JEA's 2016 Financial Statements set forth in APPENDIX A attached hereto, St. Johns County disputed JEA's methodology for computing the true-up payment related to the first 10-year anniversary, and the parties entered mediation and resolved the issue, with the result that future true-ups and payments will be made on an annual basis.

Pursuant to a 30-year interlocal agreement with Nassau County, JEA made an up-front payment in December 2001 to Nassau County in the amount of the net present value of five percent of JEA's projected gross revenues from the sale of water and wastewater (excluding reclaimed water) which JEA expected to realize in providing such services for the next 10 years in Nassau County, calculated to be \$720,000. Under the terms of the interlocal agreement, Nassau County granted JEA the right to: 1)

provide water and wastewater service to those customers in an acquired franchise area within Nassau County and 2) provide water and wastewater service to additional areas in Nassau County not currently served by either Nassau County or other water and wastewater utilities. At the end of each 10-year anniversary of this 30-year interlocal agreement with Nassau County, JEA will calculate a "true-up" based on the actual revenues realized during the 10-year period. If the revenues exceed the projected amount, JEA will pay Nassau County the amount that would have been due based on actual revenues. Additionally, after the 10-year and 20-year anniversaries of the agreement, JEA agrees to pay the county the net present value of five percent of the projected water and wastewater retail revenues that JEA expects to receive for the ensuing 10-year period. Based on this methodology, JEA paid Nassau County \$3,480,556 on January 11, 2012 for both components related to the first 10-year anniversary.

#### **Area Served**

#### Water System

The service territory of the Water System includes (a) virtually the entire City, other than the beach communities (Jacksonville Beach, Atlantic Beach and Neptune Beach), the Town of Baldwin, the active United States Navy facilities located within the City and those areas served by a community-owned water and wastewater utility that is not subject to jurisdiction of the Florida Public Service Commission (PSC) and one investor-owned water utility and one investor-owned sewer utility that provide service within certificated territories under jurisdiction of the PSC, (b) approximately 143 square miles in St. Johns County and (c) approximately 620 square miles in Nassau County. In addition, the Water System serves a small number of customers in Clay County.

The Water System provides service in an area currently comprising approximately 769 square miles in Duval County, approximately 63 square miles in St. Johns County, approximately 77 square miles in Nassau County and approximately four square miles in Clay County. In the remaining areas of the Water System's service territory not currently served by the Water System, other cities, the Navy, the community-owned utility or investor-owned utility, water service is provided through privately owned and operated wells.

Customers of the Water System are charged for water service based upon customer classification (residential, non-residential or multi-family). Charges within each classification vary based upon meter size and monthly consumption.

## Sewer System

The service territory for the Sewer System is essentially the same as that for the Water System; the area currently served by the Sewer System is approximately 76 percent of the service territory. In the remaining areas of the Sewer System's service territory not currently served by the Sewer System, other cities, the Navy, the community-owned utility or the investor-owned utility, wastewater service is provided through privately owned and operated septic tanks. Customers of the Sewer System are charged for sewer service based upon customer classification (residential, non-residential or multi-family). Charges within each classification vary and are based upon meter size and monthly flow. The Sewer System provides wholesale bulk sewer service to the investor-owned utility mentioned above and to two commercial customers.

#### **Existing Facilities**

#### Water System

The Water System consists of 19 major and 18 small water treatment plants and two repump facilities, and is divided into two major distribution grids: the north grid and the south grid (one on each

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side of the St. Johns River), and includes four minor distribution grids: Ponte Vedra, Ponce de Leon, Mayport and Nassau County. The major distribution grids are fully interconnected, which provides the Water System with a high degree of redundancy. The purpose of such interconnectivity is to provide sufficient water capacity at the least cost which meets JEA's desired level of customer service requirements and complies with water quality criteria while avoiding adverse impacts on the Floridan Aquifer. The Water System has 134 wells supplying the various water plants. Each plant consists of wells, aerators, ground storage tanks, water quality treatment and pH control and chlorination facilities. Control is by computer with regular operator oversight. The rated maximum daily treatment capacity of the Water System is approximately 292 mgd for the north and south grids together and 304 mgd for the total Water System, taking into consideration maintenance factors. Treatment at the water plants currently consists of aeration and detention to oxidize hydrogen sulfide and addition of sodium hypochlorite to adjust pH, provide disinfection and prevent biological growth in the water distribution system. JEA also uses packed tower forced draft aeration and ozone to treat hydrogen sulfide at several facilities.

The following table shows the daily average and maximum flow capacities for the Fiscal Years ended September 30, 2012 through 2016:

Fiscal Year Ended September 30,	Average Daily Flow (mgd)	Maximum Daily Flow_ (Non-Coincident) (mgd)
2012	113	154
2013	100	134
2014	101	140
2015	104	165
2016	111	154

The following table shows the rated maximum daily treatment capacity during the Fiscal Year ended September 30, 2015 for each distribution grid:

	Maximum Daily Treatment
<u>Grid</u>	Capacity (mgd)
North grid	130
South grid	162
Other	<u>12</u>
Total	<u>304</u>

The water distribution system consists of approximately 4,449 miles of water distribution mains ranging from two to 36 inches in diameter. The water distribution mains are made of various materials, including polyvinyl chloride ("PVC"), galvanized steel, ductile iron, cast iron and asbestos cement. The majority of the water distribution mains are made of PVC, with less than one percent of the water distribution system being composed of asbestos cement pipe. Water quality monitoring in the areas containing asbestos cement pipe has shown all areas to be within the United States Environmental Protection Agency ("EPA") and the Florida Department of Environmental Protection ("FDEP") regulatory limits. The asbestos cement pipe has been in service for several decades, and JEA anticipates removal of this pipe from the Water System through routine replacement of aging water mains. Virtually all new water system distribution mains are constructed of PVC.

Total finished water storage capacity of the Water System is 74 million gallons. All water storage facilities are located at the various water treatment plants, including two repump facilities. The Water System does not utilize elevated storage tanks.

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Water supply is from the Floridan Aquifer, one of the most productive aquifers in the world, with high quality water. The Floridan Aquifer covers most of Florida and parts of Georgia and South Carolina. The Floridan Aquifer should be capable of meeting JEA's needs well into the future; provided that JEA continues its three-part program and well water quality program described under "Regulation - Public Water Supply System" below. Some capital expenditures are required to maintain this capacity, but these expenditures are expected to be equal to or less than those experienced by other Florida water systems of similar size and with similar water supply. As of the date of this Annual Disclosure Report, water quality monitoring of JEA well fields has not detected the presence of any man-made compounds at actionable levels, and water quality impacts are limited to selected wells on the south grid from localized upwelling of trapped water from deep fissures - not the result of lateral salt water intrusion. JEA is the largest single user of water from the Floridan Aquifer in Duval County. Other major users include the paper industry and investor-owned utilities. JEA currently operates under one Consumptive Use of Water Permit ("CUP"). JEA expects that the current permitted withdrawal allocations should be sufficient to satisfy customer demands for the 20-year planning period, subject to compliance with the various conditions set forth in the CUP for 20 years from May 2011.

#### Sewer System

The Sewer System consists of approximately 3,898 miles of gravity sewers and force mains. The gravity sewers range from six to 84 inches in diameter and the force mains range from three to 54 inches in diameter. Approximately 69 percent of the gravity sewers and force mains are made of PVC, with the remaining sewers and mains consisting of various materials including, among others, concrete, vitrified clay, ductile iron, cast iron and polyethylene. Virtually all new sewer system gravity sewers and force mains are constructed of PVC, and the majority of sewer system rehabilitation (using pipe bursting technology) is constructed of high density polyethylene.

The Sewer System has approximately 1,371 pumping stations, approximately 790 low pressure sewer units and 11 treatment plants described below currently ranging in rated average daily treatment capacity from approximately 0.2 to 52.5 mgd. Each of the treatment plants consists of influent pumping, preliminary treatment consisting of screening and grit removal, primary treatment at three of the plants, activated sludge secondary treatment and clarification, and either ultraviolet light for disinfection or chlorination and dechlorination. All sludge from the treatment plants is pumped or trucked to either permitted land application sites or a JEA-owned biosolids processing facility for anaerobic digestion, centrifuge dewatering and pelletization in preparation for beneficial use. Current sludge production averages approximately 26.5 dry tons per day ("dt/day"). The Residuals Management Facility ("RMF") is permitted at an annual capacity of 20,290 dry tons per year (64.1 dry tons per day). The RMF produces a usable product (fertilizer) from the sludge. JEA engaged an engineering consultant in Fiscal Year 2016 to develop a long-term plan for its sludge use or disposal, as its pelletizing dryer is nearing end of life. JEA is in the process of improving the sludge handling facilities to increase reliability and ability to handle the Sewer System's sludge processing requirements for years to come. A third anaerobic digester and second gas storage tank was added in Fiscal Year 2013. Recent improvements include cleaning digesters 1 and 2, and replacing their roofs (completed in Fiscal Year 2015).

The following table shows the average and maximum daily wastewater treatment flows and the rated average and maximum daily wastewater treatment capacities during the Fiscal Year ended September 30, 2016 for each of JEA's seven regional wastewater treatment plants and corresponding information for JEA's smaller wastewater treatment plants:

[Remainder of page intentionally left blank]

Wastewater Treatment Plant	Average Daily Flow (mgd) (Fiscal Year ended September 30, 2016)	Maximum Daily Flow (Non-Coincident) (mgd) (Fiscal Year ended September 30, 2016)	Rated Average Daily Treatment Capacity (mgd) <sup>(1)</sup>	Rated Maximum Daily Treatment Capacity (mgd) <sup>(1)</sup>
Buckman	28.90	73.62	52.50	105.00
District 2	5.16	7.16	10.00	20.00
Southwest	10.50	14.16	14.00	28.00
Arlington East	19.59	25.09	25.00	50.00
Mandarin	7.96	16.93	8.75	17.50
Julington Creek Plantation	0.80	1.02	1.00	2.00
Blacks Ford	2.12	2.32	3.00	6.00
Nassau	1.09	1.27	1.55	3.10
Monterey	1.51	2.99	3.60	7.20
Ponte Vedra	0.59	1.55	0.80	1.60
Ponce De Leon	0.08	0.69	0.24	0.48
Total	<u>78.30</u>	<u>146.80</u>	<u>120.44</u>	<u>240.88</u>

<sup>(1)</sup> Since the rated maximum daily treatment capacity of each wastewater treatment plant is approximately twice the rated average daily treatment capacity, the Sewer System is able to accept and handle surges that come with peak usage periods (morning and evening) and heavy rains. In the future, peak surges from heavy rains are projected to continue to decrease through the reduction in the collection system of infiltration (*i.e.*, storm water and/or ground water that enters the sewer system through cracks or openings in the collection system) and inflow (*i.e.*, water that enters the sewer system through illegal or unpermitted piped connections to the collection system).

Five of the regional wastewater treatment plants (Buckman, District 2, Southwest, Arlington East and Mandarin) provide advanced secondary treatment and two of the regional wastewater treatment plants (Blacks Ford and Nassau) provide advanced waste treatment. The Buckman, District 2, Southwest, Arlington East, Mandarin and Blacks Ford wastewater treatment plants utilize ultraviolet light disinfection (irradiation of the water), and the Julington Creek Plantation plant utilizes chlorination for disinfection and SO<sub>2</sub> for dechlorination prior to discharge to the St. Johns River. A revised FDEP aggregate Total Maximum Daily Load limit went into effect October 2013.

Although effluent disposal currently is predominately surface water discharge, JEA initiated implementation of a reclaimed water reuse program in 1999 with its acquisition of the assets and customers of an investor-owned water and wastewater utility which had an existing program for reuse of reclaimed water by customers. JEA has established an expanding program to substantially increase water reclamation systems in Nassau, Duval and St. Johns Counties. JEA is actively developing additional reclaimed water capacity, and as of September 2016, the reclaimed water capacity (in mgd) was approximately:

<u>Facility</u>	Capacity (mgd)
Arlington East (Public Access)	8.00
Mandarin (Public Access)	4.00
Blacks Ford (Public Access)	3.00
Julington Creek Plantation (Public Access)	1.00
Ponte Vedra (Public Access)	0.80
Nassau (Public Access)	1.55
Buckman (Non-Public Access)	7.70
District 2 (Non-Public Access)	6.00
Southwest (Non-Public Access)	0.80
Ponce De Leon (Non-Public Access)	0.24
Total	<u>33.09</u>

Construction is underway at the Blacks Ford facility, converting it from its original greenfield sequencing batch reactor plant currently treating approximately 2 mgd to a regional expandable capacity oxidation ditch treatment facility with a starting capacity of 6 mgd. Construction on the new facility commenced in April 2016 and it is scheduled to be in full commercial operation by the end of fiscal year 2018. (see "WATER AND SEWER SYSTEM - WATER AND SEWER SYSTEM FUNCTIONS – Capital Program" herein.)

#### **Customers and Sales**

## Water System

During the Fiscal Year ended September 30, 2016, the Water System served an average of 333,139 customer accounts and 7,498 reuse water customers, respectively. Water System revenues, including revenues from environmental charges, sales of water, expressed in 1,000 gallons ("kgal") and the average number of Water System customer accounts, all by customer classification, for the Fiscal Years ended September 30, 2012 through 2016 are shown in the following table:

## [Remainder of page intentionally left blank]

	Fiscal Year Ended September 30				
	2016	2015	2014	2013	2012
Water Revenues (000's omitted):					
Residential	\$ 89,946	\$ 86,215	\$ 83,014	\$ 81,832	\$ 83,390
Commercial and Industrial	46,212	45,078	43,647	42,809	43,629
Irrigation	34,846	32,681	30,088	32,796	34,802
Subtotal	<u>171,004</u>	163,974	<u>156,749</u>	157,437	<u>161,821</u>
Reuse Water	10,267	<u>7,378</u>	5,533	4,551	<u>3,936</u>
TOTAL	\$181,271	\$171,352	\$162,282	\$161,988	\$165,757
Water Sales (kgals):					
Residential	17,086,586	16,271,698	15,507,752	15,741,904	16,589,517
Commercial and Industrial	13,343,376	12,870,984	12,131,400	11,777,128	12,134,488
Irrigation	5,927,957	5,415,602	4,829,184	5,568,772	6,621,039
Subtotal	36,357,919	34,558,284	32,468,336	33,087,804	35,345,044
Reuse Water	2,644,046	1,783,730	1,300,838	1,109,653	1,330,359
TOTAL	36,357,919	36,342,014	33,769,174	34,197,457	36,675,403
Average Number of Accounts:					
Residential	272,157	265,373	259,159	253,662	250,204
Commercial and Industrial	24,698	23,951	23,722	23,487	23,365
Irrigation	36,284	36,028	35,827	35,765	35,652
Subtotal	333,139	325,352	318,708	312,914	309,221
Reuse Water	7,498	5,891	4,501	3,143	2,241
TOTAL	340,637	331,243	323,209	316,057	311,462

#### Sewer System

During the Fiscal Year ended September 30, 2016, the Sewer System served an average of 257,719 customer accounts. Sewer System revenues, including revenues from environmental charges, volume of wastewater treatment billed and the average number of Sewer System customer accounts, all by customer classification, for the Fiscal Years ended September 30, 2012 through 2016 are shown in the following table:

	2016	2015	2014	2013	2012
Sewer Revenues (000's omitted):					
Residential	\$135,288	\$129,976	\$125,526	\$124,642	\$126,722
Commercial and Industrial	103,731	<u>101,910</u>	97,339	<u>96,009</u>	94,232
TOTAL	\$239,019	\$231,886	\$222,865	\$220,651	\$220,954
Volume (kgals):					
Residential	14,614,026	13,935,981	13,269,638	13,439,781	14,091,702
Commercial and Industrial	11,203,632	<u>10,987,160</u>	10,257,338	<u>10,184,193</u>	10,398,369
TOTAL	25,817,658	24,922,141	23,526,976	26,623,974	24,490,071
Average Number of Accounts:					
Residential	239,738	233,203	227,216	221,821	218,264
Commercial and Industrial	<u> 17,981</u>	<u> 17,771</u>	<u> 17,620</u>	<u>17,462</u>	<u>17,351</u>
TOTAL	257,719	250,974	244,836	239,283	235,615

#### **Largest Customers**

# Water System

The 10 highest consumption customers served by the Water System composed 6.3 percent of total Water System consumption during the Fiscal Year ended September 30, 2016. The following table sets forth the 10 highest consumption customers, by kgal, during the Fiscal Year ended September 30, 2016.

Customer Account	Annual Billed <u>(kgal)</u>	Percentage of Total
City of Jacksonville	647,071	1.7
St. Johns County Utility	374,665	1.0
Duval County School Board	251,898	0.6
Southern Baptist Hospital	245,484	0.6
The American Bottling Company	206,063	0.5
University of North Florida	172,743	0.4
Mayo Clinic Jacksonville	157,818	0.4
St. Vincents Health Systems	146,018	0.4
Johnson & Johnson Vision	145,237	0.4
Florida Coca-Cola Bottling	<u>122,257</u>	<u>0.3</u>
Total	<u>2,469,254</u>	<u>6.3</u>

#### Sewer System

The 10 customers with the highest usage level served by the Sewer System composed 6.0 percent of the total volume of wastewater treatment billed during the Fiscal Year ended September 30, 2016. The following table sets forth the 10 customers with the highest usage level, by volume of wastewater treatment billed, during the Fiscal Year ended September 30, 2016.

[Remainder of page intentionally left blank]

Customer Accounts	Annual Billed <u>(kgal)</u>	Percentage of Total
City of Jacksonville	365,736	1.4
Duval County School Board	203,415	0.8
St. Johns County Utility	203,169	0.8
The American Bottling Company	130,443	0.5
Southern Baptist Hospital	128,221	0.5
St. Vincents Health Systems	120,806	0.5
American Home Portfolio LLC	102,780	0.4
Mayo Clinic Jacksonville	98,065	0.4
Renessenz	91,478	0.4
Florida Coca-Cola Bottling	<u>89,859</u>	<u>0.3</u>
Total	<u>1,533,972</u>	<u>6.0</u>

# **Customer Billing Procedures**

Customers are billed on a cycle basis approximately once per month. If the customer has not paid a bill within 42 days after the initial bill date, JEA may discontinue service to that customer. Customers who meet JEA's credit criteria are not assessed a deposit. Customers who do not meet JEA's credit criteria, or do not maintain a good payment record, may be assessed a deposit which may vary with consumption. A late payment fee of 1.5 percent is assessed to customers for past due balances in excess of 27 days. The amount of uncollectible accounts is budgeted to be approximately 0.21 percent of estimated gross Water and Sewer System revenues for the Fiscal Year ending September 30, 2017. Actual uncollectible accounts were 0.15 percent of gross Water and Sewer System revenues for the Fiscal Year ended September 30, 2016.

#### Rates

#### General

Water and Sewer System revenues are derived from two basic types of charges: (a) monthly service charges and (b) connection charges (which include capacity charges). Additionally, environmental charges collected are reflected in Water and Sewer System Revenues. The JEA Board has sole discretion to set rate levels and revenue requirements for the Water and Sewer System. JEA sets its retail rates after a public hearing.

Generally, Water System customers are charged for monthly water service based upon metered consumption, and Sewer System customers are charged for monthly sewer service based upon water consumption during that same month, utilizing readings of the water meters. Approximately 11 percent of the customers of the Water System have separate meters for water used for irrigation purposes. In those cases, billings for monthly sewer service exclude the water used for irrigation purposes. In the case of Sewer System customers that obtain water service from a community- or investor-owned utility, monthly sewer charges are based upon readings of that utility's water meter. In the case of Sewer System customers that obtain water from privately owned wells, water meters meeting JEA's requirements are required to be installed, and monthly sewer charges are based upon readings of those meters. In addition, in some instances, non-residential customers have separate meters to measure wastewater flows, and JEA charges those customers for sewer service based upon readings of such separate meters. Further, certain non-residential Sewer System customers are subject to surcharges for wastewater discharges that exceed certain designated levels of chemical oxygen demand and suspended solids.

On June 19, 2012, the JEA Board rescinded a previously approved increase in commercial and residential services availability charges and the environmental charge scheduled to become effective October 1, 2012, while maintaining the volumetric rate increases for commercial, as well as residential use in excess of 6,000 gallons per month, scheduled to become effective October 1, 2012. The rates for monthly water and sewer service effective as of October 1, 2012 that are shown in the following tables remain in effect as of September 30, 2016 and as of the date of this Annual Disclosure Report.

## Rates for Monthly Service

The schedules shown in the following tables reflect rates for monthly water and sewer service effective as of October 1 of each of 2011 and 2012:

#### **Water Rates**

Water users are charged a monthly service availability charge according to water meter size, plus a unit rate and an environmental charge according to the following schedules:

		Monthly Se	ervice Availabil	lity Charge		
	Resi	dential	Residentia	Irrigation_	Con	nmercial
	Effective on	October 1,	Effective on	October 1,	Effective or	October 1,
<b>Meter Size</b>	2012	2011	2012	2011	2012	2011
5/8"	\$ 12.60	\$ 12.60	\$ 12.60	\$ 12.60	\$ 12.60	\$ 12.60
3/4"	18.90	18.90	18.90	18.90	18.90	18.90
1"	31.50	31.50	31.50	31.50	31.50	31.50
1 1/2"	63.00	63.00	63.00	63.00	63.00	63.00
2"	100.80	100.80	100.80	100.80	100.80	100.80
3"	201.60	201.60	201.60	201.60	201.60	201.60
4"	_	-	-	-	315.00	315.00
6"	-	-	-	-	630.00	630.00
8"	-	-	-	-	1,008.00	1,008.00
10"	_	-	-	-	1,974.55	1,974.55
12"	-	-	-	-	3,691.55	3,691.55
20"	_	-	-	-	7,726.50	7,726.50

#### **Monthly Service Availability Charge**

	Multi-	Family	Multi-Family Irrigation; <u>Commercial Irrigation</u>		
	Effective on (	October 1,	Effective on (	e on October 1,	
<b>Meter Size</b>			2012	2011	
5/8"	\$ 18.41	\$ 18.41	\$ 12.60	\$ 12.60	
3/4"	27.62	27.62	18.90	18.90	
1"	46.03	46.03	31.50	31.50	
1 1/2"	92.05	92.05	63.00	63.00	
2"	147.28	147.28	100.80	100.80	
3"	294.56	294.56	201.60	201.60	
4"	460.25	460.25	315.00	315.00	
6"	920.50	920.50	630.00	630.00	
8"	1,472.80	1,472.80	1,008.00	1,008.00	
10"	2,117.15	2,117.15	- -	-	
12"	3,958.15	3,958.15	-	-	
20"	8,284.50	8,284.50	-	-	

## Unit Rate (per kgal)

					·-	- /					
				Noi	1-Irrigatio	on				<u>Irrigation</u>	<u> </u>
Effective on October 1,	•	Residenti Tiers (kga			nercial er Size		<u>-Family</u> er Size		lential (kgal)	Comr	Family; <u>nercial</u> (kgal)
	<u>1-6</u>	<u>7-20</u>	<u>&gt;20</u>	<u>≤8"</u>	<u>&gt; 8"</u>	<u>≤8"</u>	<u>&gt; 8"</u>	<u>1-14</u>	<u>&gt;14</u>	<u>1-14</u>	<u>&gt;14</u>
2011	\$0.93	\$2.28	\$5.35	\$1.48	\$1.23	\$1.00	\$1.00	\$2.28	\$5.35	\$2.87	\$3.36
2012	0.93	2.60	5.60	1 49	1 24	1.00	1.00	2.60	5.60	3 44	3 96

## **Environmental Charge (per kgal)**

		Effective on
		October 1,
	2012	2011
Water	\$0.37	\$0.37
Irrigation	0.37	0.37

## **Sewer Rates**

Users of the Sewer System are charged a monthly service availability charge according to water meter size, plus a unit rate based on water consumption from JEA, community- or investor-owned utilities or private wells, as applicable and an environmental charge according to the following schedules:

## Monthly Service Availability Charge

	•					
	Resi	dential	Mult	i-Family	Con	nmercial
	Effective on	October 1,	Effective on	October 1,	Effective on	October 1,
Meter Size	_2012_	_2011_	_2012_	_2011_	2012	2011
5/8"	\$ 14.10	\$ 14.10	\$ 24.68	\$ 24.68	\$ 21.15	\$ 21.15
3/4"	21.15	21.15	37.01	37.01	31.73	31.73
1"	35.25	35.25	61.69	61.69	52.88	52.88
1 1/2"	70.50	70.50	123.38	123.38	105.75	105.75
2"	112.80	112.80	197.40	197.40	169.20	169.20
3"	225.60	225.60	394.80	394.80	338.40	338.40
4"	-	-	616.88	616.88	528.75	528.75
6"	-	-	1,233.75	1,233.75	1,057.50	1,057.50
8"	-	-	1,974.00	1,974.00	1,692.00	1,692.00
10"	-	-	2,837.63	2,837.63	2,432.25	2,432.25
12"	-	-	5,305.13	5,305.13	4,547.25	4,547.25
20"	-	-	11,103.7	11,103.7	9,517.50	9,517.50
			5	5		

# Unit Charge (per kgal)

	Resi	dential	<u>Multi-F</u> <u>Comme</u>	•
	Effective on October 1,		Effective on (	October 1,
Tiers (kgal)	_2012_	2011	2012	_2011_
1-6	\$4.94	\$4.94	-	-
7-20	6.02	5.73	-	-
All	-	-	\$6.02	\$5.73

## **Environmental Charge (per kgal)**

## **Effective on October**

1,

	_2012_	_2011_
Residential: 1-20 kgal	\$0.37	\$0.23
Commercial; Multi-Family;	0.37	0.23
Limited Service: All kgal		

#### **Reclaimed Water Rates**

Reclaimed (reuse) water users are charged a monthly service availability charge according to water meter size, plus a unit rate and an environmental charge according to the following schedules:

## Reclaimed System: Monthly Service Availability Charge

	Residential <sup>(1)</sup>		Multi-Family (1);	Commercial (1)
	Effective on	October 1,	Effective on October 1,	
<b>Meter Size</b>	2012	2011	2012	_2011_
5/8"	\$ 12.60	\$ 12.60	\$ 12.60	\$ 12.60
3/4"	18.90	18.90	18.90	18.90
1"	31.50	31.50	31.50	31.50
1 1/2"	63.00	63.00	63.00	63.00
2"	100.80	100.80	100.80	100.80
3"	201.60	201.60	201.60	201.60
4"	_	-	315.00	315.00
6"	-	-	630.00	630.00
8"	-	-	1,008.00	1,008.00

<sup>(1)</sup> Non-bulk reclaimed customers will be charged an additional \$6.00 regardless of meter size to cover costs due to regulatory requirements.

#### Reclaimed System: Unit Charge (per kgal)

	Residential		Multi-Family; (	Commercial_
	Effective on October 1,			ctober 1,
Tiers (kgal)	2012	2011	2012	_2011_
1-14	\$2.60	\$2.28	\$3.44	\$2.87
> 14	5.60	5.35	3.96	3.36

#### Reclaimed System: Environmental Charge (per kgal)

Effective on October 1,

	2012	_2011_
per kgal	\$0.37	\$0.37

Note: Environmental charge not applicable to bulk reclaimed usage.

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#### Connection and Capacity Charges

In addition to the monthly charges for water and wastewater service described above, JEA assesses connection and capacity charges for new Water and Sewer System customers, which charges are designed to cover some of the capital costs of providing service to new customers. The schedules shown in the following tables show the connection charges for new Water and Sewer System customers:

#### **Water System Connection Charges**

<b>Meter Size</b>	Tap Fee	Set Fee
3/4"	\$610.00	\$202.33
1"	610.00	223.71
1 ½"	700.00	527.26(1)
2" and greater	700.00	588.96(1)

<sup>(1)</sup> Or actual installation cost, whichever is greater.

#### **Sewer System Connection Charges**

<b>Connection Size</b>	<b>Charge</b>
Up to 6"	\$1,853.00
Greater than 6"	(1)

<sup>(1)</sup> Charge based on actual installation cost.

New Water System customers also are assessed a one-time plant capacity charge for new connections. Effective October 1, 2005, that charge is equal to the greater of (x) (i) in the case of residential customers, a minimum of \$339.50 and (ii) in the case of commercial customers, a minimum of \$414.12 or (y) \$0.97 per connected gallon (average daily flow).

New Sewer System customers also are assessed a one-time capacity charge for new connections. That charge is equal to the greater of (x) (i) in the case of residential customers, a minimum of \$1,274.00 and (ii) in the case of commercial customers, a minimum of \$1,554.02 or (y) \$3.64 per connected gallon (average daily flow).

In each of the foregoing cases, average daily flow is determined by reference to industry standards, subject to review and approval by the JEA Board.

In addition, all new Water and Sewer System connections are assessed a one-time "line extension growth" capacity charge that is a minimum of \$1,695.00.

Capacity charges are included within the revenues pledged for payment of the Water and Sewer System Bonds. However, under applicable Florida law and in accordance with the provisions of the Water and Sewer System Resolution, such capacity charges may be used and applied only for the purpose of paying costs of expansion of the Water and Sewer System, or paying or providing for the payment of debt service on Water and Sewer System Bonds, Subordinated Indebtedness or other indebtedness of JEA relating to the Water and Sewer System issued for such purpose.

On June 19, 2007, the JEA Board modified the retail reclaimed (reuse) water rate, which resulted in a separate rate for commercial customers in DRIs equal to potable, non-DRI, commercial irrigation rates and added a new rate class for commercial bulk reclaimed (reuse) water service. These changes became effective on October 1, 2007.

## Regulation

#### Water and Sewer System

The future financial condition of the Water and Sewer System could be adversely affected by, among other things, legislation, environmental and other regulatory actions promulgated by applicable federal, state and local governmental agencies. Future changes to new and existing regulations may substantially increase the cost of water and sewer service by requiring changes in the design or operation of existing or new facilities. JEA cannot predict future policies such agencies may adopt.

## Public Water Supply System

The St. Johns River Water Management District ("SJRWMD") regulates groundwater withdrawals and issues permits for the same. JEA was issued a 20-year CUP in May 2011 from the SJRWMD. As of the date of this Annual Disclosure Report, modeling efforts have indicated that a sustainable groundwater supply can continue to be met for the 20-year planning period out to 2031 and beyond with a three-part program that is the basis of JEA's water capital improvement plan: (i) continued expansion of the reuse system, (ii) measured conservation program and (iii) water transfers from areas with a higher supply on JEA's north grid to areas with a lower supply on JEA's south grid via river-crossing pipelines. JEA has also implemented a groundwater quality management program to mitigate the effects of (non-lateral) saltwater intrusion into specific wells on the systems south grid that includes routine well monitoring, backplugging of specific wells, and reducing or replacing wells that show continued increases in chlorides. The 2016 permitted CUP allocation was 131.28 million gallons per day. Actual well withdrawals were 111.85 million gallons per day.

The Suwanee River Water Management District ("SRWMD"), FDEP and SJRWMD are each in the process of setting or revising Minimum Flow and Level (MFL) standards for surface water in the vicinity of the Lower Santa Fe River (SRWMD and FDEP) and Keystone Lakes (SJRWMD) areas. In 2015 two MFLs were adopted in the SRWMD and a determination made that a recovery strategy is necessary. JEA will participate cooperatively in these strategies to the extent of its proportionate share of impact. Because technical tools, such as a new groundwater flow model, are still under development, JEA's effect on the 2015 MFL's is unknown. JEA is actively engaged in cooperation with seven other northeast Florida utilities known as the Northeast Florida Utility Coordinating Group (NFUCG) in rule development on these issues.

In addition, the SJRWMD and SRWMD have developed a joint North Florida Regional Water Supply Plan, which was released in October 2016 and approved in January 2017. The plan concludes that future water demands through 2035 can be met with water conservation measures and water supply options included in the plan

## Wastewater Treatment System

The Sewer System is regulated by EPA under provisions of the Federal Clean Water Act and the Federal Water Pollution Control Act. EPA has delegated the wastewater regulatory program to the FDEP. Except as described below, the Sewer System is in substantial compliance with all federal and state wastewater regulations.

In 2013 EPA and FDEP reached an agreement on the adoption of numeric nutrient criteria ("NNC") for the State of Florida, As part of the NNC adoption process, EPA re-approved the Lower St. Johns River nutrient Total Maximum Daily Load ("TMDL"). The EPA re-approval means the TMDL will remain the legally enforceable nutrient standard for the Lower St. Johns River. JEA has completed all the treatment plant improvements required of the utility by the TMDL and its facilities are in compliance with its nutrient allocation.

Because JEA has exceeded its own permitted nitrogen reduction goals, it has the ability to generate Water Quality Credits. JEA has previously recorded a reduction in its NPDES permit to generate and transfer 30.34 metric tons per year of Total Nitrogen Water Quality Credits to the City of Jacksonville through 2023 and is positioned to remain in compliance with its Aggregate Nitrogen permit. JEA has agreed to provide these annual Water Quality Credits to the City for no compensation through December 31, 2023.

As the regulatory reduction of Total Nitrogen in the Lower St. Johns River is an ongoing annualized requirement that both the City and JEA will be required to meet beyond December 31, 2023, the City and JEA have agreed to engage in discussions to work on a plan for meeting the future needs of both parties beyond December 31, 2023.

On December 11, 2006, JEA and the FDEP executed a long-term sanitary sewer overflows ("SSO") consent order. The long-term SSO consent order is the mechanism under which periodic, unforeseeable JEA SSOs are reviewed and adjudicated. The SSOs for each fiscal year are typically adjudicated on an annual to bi-annual basis. In October 2016, Northeast Florida experienced the effects of Hurricane Matthew. The sustained winds from that storm caused a number of extended power outages, resulting in a high number of SSOs during this extreme weather event. To address SSOs that occurred in Fiscal Year 2016 and during Hurricane Matthew, JEA expects to be assessed a penalty of \$231,000. In lieu of paying the penalty, JEA has opted to spend at least \$346,000 on an environmental improvement project as approved by FDEP. To further reduce the frequency of SSOs in the future, JEA is undertaking an extreme weather events hardening exercise to evaluate and implement processes or physical projects to reduce the likelihood of SSOs even during extreme weather events. JEA has approached FDEP to assist in providing an independent 3rd party review of its Capacity, Management, Operation, and Maintenance ("CMOM") program, which was initially implemented in 2008. The CMOM program was developed by EPA to provide a standardized, systematic framework for utilities to manage and evaluate how well their wastewater systems are being operated and maintained in an effort to reduce the frequency of future SSOs.

#### Capital Program

The Water and Sewer System's projected capital program for the five-year period ending September 30, 2021 is summarized below. The capital program is centered on renewal and replacement and to enable the Water and Sewer System to remain in compliance with all applicable regulatory requirements, as well as to lower operating and maintenance expenses. Major projects include the expansion of the Blacks Ford Water Reclamation Facility from 3.0 mgd to 6.0 mgd, expansion of the Southwest Water Reclamation Facility from 14.0 mgd to 18.0 mgd, expansion of the Nassau Regional Water Reclamation Facility from 2.0 mgd to 4.0 mgd, construction of the new Greenland Water Reclamation Facility with a capacity of 6.0 mgd, the rebuild of the biosolids operation at the Buckman Water Reclamation Facility and construction of a 6.0 mgd Water Treatment Plant to serve customers in the northwestern part of JEA's service territory. This program contains funding targeted to improve water and sewer treatment plants, in addition to meeting the three-part program described in "Regulation - *Public Water Supply System*" above to maintain sustainable water supply for JEA's customers.

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# Water and Sewer System Capital Program (000's omitted)

Fiscal Year Ending	
September 30,	<b>Amount</b>
2017	\$ 205,000
2018	201,000
2019	180,000
2020	169,000
2021	<u>167,000</u>
Total	\$922,000

The total amount of the capital program for the five-year period is estimated to be approximately \$922 million. It is expected that the total amount of the capital program for this period will be provided from Water and Sewer System revenues (including capacity charges). The projected total amount of the capital program may be affected by future environmental legislation and regulation. See "Regulation" above.

#### FINANCIAL INFORMATION RELATING TO WATER AND SEWER SYSTEM

## **Debt Relating to Water and Sewer System**

#### Water and Sewer System Bonds

As of September 30, 2016, \$1,368,695,000 in aggregate principal amount of bonds (the "Water and Sewer System Bonds") issued pursuant to the resolution of JEA adopted on February 18, 1997 and referred to therein as the "Water and Sewer System Revenue Bond Resolution" (as amended, restated and supplemented, the "Water and Sewer System Resolution") was outstanding. As of the date of this Annual Disclosure Report, there is \$1,340,075,000 in aggregate principal amount of Water and Sewer System Bonds outstanding under the Water and Sewer System Resolution, consisting of (a) \$171,735,000 in aggregate principal amount of variable rate Water and Sewer System Bonds and (b) \$1,168,340,000 in aggregate principal amount of fixed rate Water and Sewer System Bonds.

Water and Sewer System Bonds may be issued for the purposes of (a) paying or providing for the payment of Costs (as defined in the Water and Sewer System Resolution) of the Water and Sewer System and (b) refunding any Water and Sewer System Bonds. See "SUMMARY OF CERTAIN PROVISIONS OF THE WATER AND SEWER SYSTEM RESOLUTION - Additional Water and Sewer System Bonds" in APPENDIX B attached hereto.

Pursuant to the Water and Sewer System Resolution and the laws of the State of Florida, the amount of Water and Sewer System Bonds that may be issued by JEA is not limited and is subject only to approval by the Council and satisfaction of the conditions set forth in the Water and Sewer System Resolution.

From time to time, JEA requests Council approval of the issuance of Water and Sewer System Bonds and Subordinated Indebtedness (as defined in the Water and Sewer System Resolution). Pursuant to previous Council approvals, JEA currently is authorized to issue additional Water and Sewer System Bonds and/or Subordinated Indebtedness for the purpose of paying or providing for the payment of Costs (as defined in the Water and Sewer System Resolution) of the Water and Sewer System in an aggregate principal amount of \$218,078,023. JEA expects that such authorization will be adequate to finance its Water and Sewer System capital program through the Fiscal Year ending September 30, 2021. See "WATER AND SEWER SYSTEM - WATER AND SEWER SYSTEM FUNCTIONS - Capital Program" herein.

JEA also has received approvals from the Council for the issuance of Water and Sewer System Bonds for the purpose of refunding outstanding Water and Sewer System Bonds and Subordinated Indebtedness. JEA may issue additional Water and Sewer System Bonds or Subordinated Water and Sewer System Bonds to refund outstanding Water and Sewer System Bonds and/or Subordinated Indebtedness from time to time as it deems economical or advantageous.

In the future, JEA will continue to seek authorization as needed from the Council to issue additional Water and Sewer System Bonds and/or Subordinated Indebtedness in order to enable it to finance its Water and Sewer System capital program.

A summary of certain provisions of the Water and Sewer System Resolution, including a description of the proposed amendments thereto described below, is attached to this Annual Disclosure Report as APPENDIX B.

Liquidity support in connection with tenders for purchase of the Variable Rate Water and Sewer System Revenue Bonds, 2008 Series B (the "SBPA Supported Variable Rate Water and Sewer Bond") currently is provided by a bank pursuant to a standby bond purchase agreement between JEA and such bank. Credit and liquidity support for JEA's Variable Rate Water and Sewer System Revenue Bonds, 2008 Series A-2 (the "LOC Supported Variable Rate Water and Sewer System Bond" and, together with the SBPA Supported Variable Rate Water and Sewer System Bond, the "Senior Liquidity Supported Water and Sewer Bonds") currently is provided by a direct-pay letter of credit issued by a different bank. Any Senior Liquidity Supported Water and Sewer Bond that is purchased by the applicable bank pursuant to its (i) standby bond purchase agreement between JEA and such bank or (ii) letter of credit issued in connection with the reimbursement agreement between JEA and such bank, as applicable, and is not remarketed is required to be repaid as to principal in equal semiannual installments over a period of approximately five years from the date so purchased. In addition, any Senior Liquidity Supported Water and Sewer Bond that is purchased by the applicable bank pursuant to its standby bond purchase agreement or letter of credit reimbursement agreement, as applicable, will constitute an "Option Bond" within the meaning of the Water and Sewer System Resolution and, as such, may be tendered or deemed tendered to JEA for payment upon the occurrence of certain "events of default" on the part of JEA under such standby bond purchase agreement or letter of credit reimbursement agreement, as applicable. Upon any such tender or deemed tender for purchase, the Senior Liquidity Supported Water and Sewer Bond so tendered or deemed tendered will be due and payable immediately. For a discussion of certain "ratings triggers" contained in such standby bond purchase agreement and such reimbursement agreement, see "OTHER FINANCIAL INFORMATION - Effect of JEA Credit Rating Changes" herein. As of the date of this Annual Disclosure Report, no Senior Liquidity Supported Water and Sewer Bonds are held by the banks providing such standby bond purchase agreement or such letter of credit. The standby bond purchase agreement and letter of credit are subject to periodic renewal at the discretion of the respective bank. The current expiration date for the standby bond purchase agreement is May 10, 2017.8, 2020, and the current expiration date for the letter of credit is December 2, 2018.

## Proposed Amendments to the Water and Sewer System Resolution

In June 2013, JEA adopted Resolution No. 2013-10 ("Resolution 2013-10") which, upon the consent thereto of the holders of a majority in principal amount of Water and Sewer System Bonds Outstanding, provides for the amendment of certain provisions of the Water and Sewer System Resolution and the First Supplemental Water and Sewer System Revenue Bond Resolution, adopted by JEA on August 19, 1997 (the "First Supplemental Resolution").

Should the amendments become effective, they will:

- (a) Revise certain definitions in order to allow for the more efficient and advantageous investment of certain funds held under the Water and Sewer System Resolution; and
- (b) Revise certain provisions of the First Supplemental Resolution related to the use of a reserve fund credit instrument (as defined therein) to fund the Initial Subaccount in the Debt Service Reserve Fund established thereby.

As of the date of this Annual Disclosure Report, there is \$\frac{1}{4},340,075,000\right\} in aggregate principal amount of Water and Sewer System Revenue Bonds Outstanding, and JEA has obtained the consent to the amendments contained in Resolution 2013-10 of the holders of \$\frac{1}{3}78,165,000\frac{1}{3}\text{ in aggregate principal} amount of such Water and Sewer System Revenue Bonds Outstanding, which amount constitutes [28.22] percent in aggregate principal amount of Water and Sewer System Revenue Bonds Outstanding. In addition, JEA intends to obtain additional consents to the amendments contained in Resolution 2013-10 each time it issues additional Water and Sewer System Bonds. JEA also may seek consents to the amendments contained in Resolution 2013-10 from the holders of the Outstanding Water and Sewer System Bonds (including, in the case of the Senior Liquidity Supported Variable Rate Prior Series Bonds, by causing such Bonds to become subject to mandatory tender for purchase in order to deem the holders thereof to have consented to the amendments contained in Resolution 2013-10 upon the remarketing of such Bonds, as permitted by such Bonds and the Water and Sewer System Resolution). Whether or when the amendments contained in Resolution 2013-10 become effective is dependent upon the amount of additional Water and Sewer System Bonds that may be issued by JEA in the future, the timing of such issuances and whether or not JEA decides to seek consents to the amendments contained in Resolution 2013-10 from the holders of the Outstanding Water and Sewer System Bonds.

# Subordinated Water and Sewer System Bonds

As of September 30, 2016, \$274,820,000 in aggregate principal amount of bonds (the "Subordinated Water and Sewer System Bonds") issued pursuant to the resolution of JEA adopted on May 15, 2003 and referred to therein as the "Water and Sewer System Subordinated Revenue Bond Resolution" (as supplemented, the "Subordinated Water and Sewer System Resolution") was outstanding. As of the date of this Annual Disclosure Report, there is \$269,565,000 in aggregate principal amount of Subordinated Water and Sewer System Bonds outstanding under the Subordinated Water and Sewer System Bonds outstanding under the Subordinated Water and Sewer System Bonds and (b) \$160,130,000 in aggregate principal amount of fixed rate Subordinated Water and Sewer System Bonds.

The Subordinated Water and Sewer System Bonds may be issued (a) for any lawful purpose of JEA relating to the Water and Sewer System or (b) to refund any of the Water and Sewer System Bonds or the Subordinated Water and Sewer System Bonds.

Pursuant to the Subordinated Water and Sewer System Resolution and the laws of the State of Florida, and in accordance with the Water and Sewer System Resolution, the amount of Subordinated Water and Sewer System Bonds that may be issued by JEA is not limited and is subject only to approval by the Council and satisfaction of the conditions set forth in the Subordinated Water and Sewer System Resolution. For a discussion of the Council authorization currently in effect for the issuance of Water and Sewer System Bonds and/or Subordinated Water and Sewer System Bonds, see subsection "Water and Sewer System Bonds" above in this section.

A summary of certain provisions of the Subordinated Water and Sewer System Resolution, including a description of the proposed amendments thereto described below, is attached to this Annual Disclosure Report as APPENDIX C.

Liquidity support in connection with tenders for purchase of the Variable Rate Water and Sewer System Subordinated Revenue Bonds, 2008 Series A-1, 2008 Series A-2 and 2008 Series B-1 (the "Subordinated Liquidity Supported Water and Sewer Bonds") currently is provided by certain banks pursuant to standby bond purchase agreements between JEA and each such bank. Any Subordinated Liquidity Supported Water and Sewer Bond that is purchased by the applicable bank pursuant to its standby bond purchase agreement and is not remarketed is required to be repaid as to principal in equal semiannual installments over a period of approximately five years from the date so purchased. In addition, any Subordinated Liquidity Supported Water and Sewer Bond that is purchased by the applicable bank pursuant to its standby bond purchase agreement will constitute an "Option Subordinated Bond" within the meaning of the Subordinated Water and Sewer System Resolution and, as such, may be tendered or deemed tendered to JEA for payment upon the occurrence of certain "events of default" on the part of JEA under the standby bond purchase agreement. Upon any such tender or deemed tender for purchase, the Subordinated Liquidity Supported Water and Sewer Bond so tendered or deemed tendered will be due and payable immediately. For a discussion of certain "ratings triggers" contained in such standby bond purchase agreements, see "OTHER FINANCIAL INFORMATION - Effect of JEA Credit Rating Changes" herein. As of the date of this Annual Disclosure Report, no Subordinated Liquidity Supported Water and Sewer Bonds are held by the banks providing such standby bond purchase agreements. Such standby bond purchase agreements are subject to periodic renewal at the discretion of the respective bank. The current expiration dates for the standby bond purchase agreements range from May 10, 2017 to July 29, 2018. March 19, 2018 to May 8, 2020.

#### Water and Sewer System Contract Debts

Contract Debts, a component of the Water and Sewer System's Operation and Maintenance Expenses, is defined by the Water and Sewer System Resolution to mean any obligations of JEA under any contract, lease, installment sale agreement, bulk purchase agreement or otherwise to make payments out of the Revenues of the Water and Sewer System for property, services or commodities whether or not the same are made available, furnished or received. JEA has not incurred any obligations constituting Contract Debts under the Water and Sewer System Resolution, but it may do so in the future. All Contract Debts will be payable from the Revenues of the Water and Sewer System prior to any payments from such Revenues for indebtedness not constituting Contract Debt issued for the Water and Sewer System, including the Water and Sewer System Bonds and Subordinated Indebtedness (including the Subordinated Water and Sewer System Bonds).

#### Water and Sewer System Support of the District Energy System Bonds

Effective as of October 1, 2004, JEA established the District Energy System, a separate system to provide chilled water services and other local district energy functions. JEA transferred its assets relating to chilled water production and distribution from the Electric System to the District Energy System. The Electric System received approximately \$30,000,000 from the District Energy System for the transferred assets. The District Energy System is operated as a separate system for accounting and financing purposes. See the financial statements of JEA attached hereto as APPENDIX A.

As of the date of this Annual Disclosure Report, there is \$38,125,000 in aggregate principal amount of District Energy System Bonds outstanding under the District Energy System Resolution.

Pursuant to Resolution No. 2013-2, adopted by JEA on March 19, 2013, revenues of the Water and Sewer System shall be deposited into a special subaccount in the Debt Service Reserve Account (the "2013 Series A Bonds Subaccount") established for the District Energy System Refunding Revenue Bonds, 2013 Series A (the "DES 2013 Series A Bonds") and pledged to pay debt service on the DES 2013 Series A Bonds in the event that revenues of the District Energy System are insufficient to pay debt service on such DES 2013 Series A Bonds.

## Schedules of Debt Service Coverage

The following table sets forth Schedules of the Debt Service Coverage for the Water and Sewer System for the years ended September 30, 2016 and September 30, 2015, respectively. Such Schedules of Debt Service Coverage were derived from supplemental information included with JEA's 2016 Financial Statements and certain other information available to JEA. Such Schedules of Debt Service Coverage should be read in conjunction with such financial statements and the notes thereto.

JEA did not issue any Water and Sewer System Bonds during the Fiscal Year ended September 30, 2016.

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# JEA Water and Sewer System Schedules of Debt Service Coverage (000's omitted)

#### Fiscal Year ended September 30

	Бересі	iibei 50
<del>-</del>	2016	2015
Revenues:		
Water	\$ 170,807	\$ 163,705
Water capacity fees <sup>(2)</sup>	7,893	7,013
Sewer		238,862
Sewer capacity fees <sup>(2)</sup>		12,254
Investment income	3,802	2,898
Other, net (3)	11,746	13,948
Less: amount paid from the Revenue Fund into the Rate Stabilization Fund	(23,489)	(22,172)
Plus: amount paid from the Rate Stabilization Fund into the Revenue Fund	21,790	
Total revenues.	_455,338	_416,508
Less: Operating and maintenance expenses <sup>(4)</sup>	142,208	_138,037
Net revenues.	\$ <u>_</u> 313,130	\$ _ 278,471
Debt service on Water and Sewer System Bonds (prior to reduction of		
Build America Bonds subsidy)(5)	\$ 85,332	\$ 91,392
Less: Build America Bonds subsidy		_(2,489)
Debt service on Water and Sewer System Bonds	\$ 82,830	\$ _ 88,903
Debt service coverage on Water and Sewer System Bonds 6	3.78x	3.13x
Net revenues (from above)	\$ 313,130	\$ _ 278,471
Debt service on Water and Sewer System Bonds (from above)	\$ 82,830	\$ 88,903
Plus: debt service on Subordinated Water and Sewer  System Bonds <sup>(5)</sup>	12,587	12,205
Debt service on Water and Sewer System Bonds and Subordinated Water and Sewer System Bonds	Φ 05.415	\$ <sub>=</sub> 101,108
Debt service coverage on Water and Sewer System Bonds and Subordinated Water and Sewer System Bonds <sup>2,7(2)(7)</sup>	2.20	2.75x

(1) +Calculated in conformity with the Water and Sewer System Resolution and the Subordinated Water and Sewer System Resolution.

- Includes connection charges. Excludes the Build America Bonds subsidy.
- 4 Excludes depreciation and amortization.
- 5 Debt service on Water and Sewer System Bonds and Subordinated Water and Sewer System Bonds includes accruals of principal and interest (exclusive of capitalized interest) on the debt relating to the Water and Sewer System outstanding during the respective periods, but does not include amortization of original issue discount or costs of issuance.
- 6 Net revenues divided by debt service on Water and Sewer System Bonds. Minimum annual coverage required under the Water and Sewer System Resolution is 1.25x.
  - TNet revenues divided by debt service on Water and Sewer System Bonds and Subordinated Water and Sewer System Bonds. Minimum annual coverage required under the Subordinated Water and Sewer System Resolution is either (i) 1.0x Debt service on Water and Sewer System Bonds and Subordinated Water and Sewer System Bonds (excluding Capacity Charges) or (ii) the sum of (x) 1.0x Debt service on Water and Sewer System Bonds and (y) 1.20x Debt service on Subordinated Water and Sewer System Bonds (including Capacity Charges).

<sup>&</sup>lt;sup>2</sup>Revenues include Capacity Charges (see "WATER AND SEWER SYSTEM – *Water and Sewer System Functions* – Rates – *Connection and Capacity Charges*" in the Annual Disclosure Report), which constitute "impact fees" within the meaning of applicable Florida law. Under applicable Florida law, Capacity Charges may be used and applied only for the purpose of paying Costs of expansion of the Water and Sewer System, or paying or providing for the payment of debt service on Water and Sewer System Bonds, Subordinated Indebtedness or other indebtedness of JEA relating to the Water and Sewer System issued for such purpose. JEA from time to time may elect to use Capacity Charges collected by it from its customers for payment of debt service on the Water and Sewer System Bonds or the Subordinated Water and Sewer System Bonds. JEA, however, currently expects that all Capacity Charges will be applied to the payment of Costs of expansion of the Water and Sewer System. For the Fiscal Year ended September 30, 2016 and 2015, Capacity Charges included in Revenues totaled approximately \$21.7 million and \$19.3 million, respectively. Had such Capacity Charges not been included in Revenues for the Fiscal Year ended September 30, 2016 and 2015, the debt service coverage for the Water and Sewer System Bonds and the Subordinated Water and Sewer System Bonds would have been 3.05x and 2.56x, respectively.

#### Management's Discussion of Operations - JEA

## Water and Sewer System Schedules of Debt Service Coverage

**Revenues.** Effective for the Fiscal Year ended September 30, 2015, the JEA Board adopted and JEA implemented a pricing policy that established cost-based rates for both the Electric and Water and Sewer Systems. The rate policy as adopted included various surcharges and stabilization funds that meet the requirements for deferral under GASB 62.

Water revenues increased \$7.1 million, or 4.3 percent, for the Fiscal Year ended September 30, 2016 as compared to the Fiscal Year ended September 30, 2015, primarily related to a 5.2 percent increase in consumption and a 2.4 percent increase in customer accounts. Sewer revenues increased \$10.1 million, or 4.2 percent, for the Fiscal Year ended September 30, 2016 as compared to the Fiscal Year ended September 30, 2015, primarily related to a 3.6 percent increase in sales and a 2.7 percent increase in sewer accounts.

Water sales volume increased 1,799,635 kgals, or 5.2 percent, to 36,357,919 kgals for the Fiscal Year ended September 30, 2016 from 34,558,284 kgals for the Fiscal Year ended September 30, 2015. Sewer sales volume increased 895,517 kgals, or 3.6 percent, to 25,817,658 kgals for the Fiscal Year ended September 30, 2016 from 24,922,141 kgals for the Fiscal Year ended September 30, 2015.

**Operating and Maintenance Expenses.** Operating and maintenance expenses increased \$4.2 million, or 3.0 percent, for the Fiscal Year ended September 30, 2016 as compared to the Fiscal Year ended September 30, 2015, primarily related to a prior year workers' compensation premium refund that occurred in March 2015 and a self-insurance contribution made in March 2016.

**Net Revenues.** Net revenues available for debt service increased \$34.6 million, or 12.4 percent, to \$313.1 million for the Fiscal Year ended September 30, 2016 from \$278.5 million for the Fiscal Year ended September 30, 2015. Total revenues increased \$38.8million, or 9.3percent, and total operating expenses increased \$4.2million, or 3.0 percent, for the Fiscal Year ended September 30, 2016 as compared to the Fiscal Year ended September 30, 2015, as described above.

**Debt Service on Water and Sewer System Bonds.** Debt service on Water and Sewer System Bonds for the Fiscal Year ended September 30, 2016 decreased \$6.1 million, or 6.8 percent, as compared to the Fiscal Year ended September 30, 2015, primarily related to lower interest expense and lower principal amortization on fixed rate bonds as a result of lower outstanding debt balances.

JEA did not issue any Water and Sewer System Bonds during the Fiscal Year ended September 30, 2016 and the Fiscal Year ended September 30, 2015.

**Debt Service Coverage on Water and Sewer System Bonds**. The debt service coverage ratio on Water and Sewer System Bonds increased to 3.78 times for the Fiscal Year ended September 30, 2016 as compared to the debt service coverage ratio of 3.13 times for the Fiscal Year ended September 30, 2015, as a result of the 12.4 percent increase in net revenues available for debt service and the 6.8 percent decrease in debt service requirement on Water and Sewer System Bonds between such periods.

<u>Debt Service on Subordinated Water and Sewer System Bonds</u>. Debt service on Subordinated Water and Sewer System Bonds increased \$0.4 million, or 3.1 percent, for the Fiscal Year ended September 30, 2016 as compared to the Fiscal Year ended September 30, 2015, primarily related to higher principal amortization and higher interest expense.

<u>4833-6502-8159.13</u> <u>34</u>

JEA did not issue any Subordinated Water and Sewer System Bonds during the Fiscal Year ended September 30, 2016 and the Fiscal Year ended September 30, 2015.

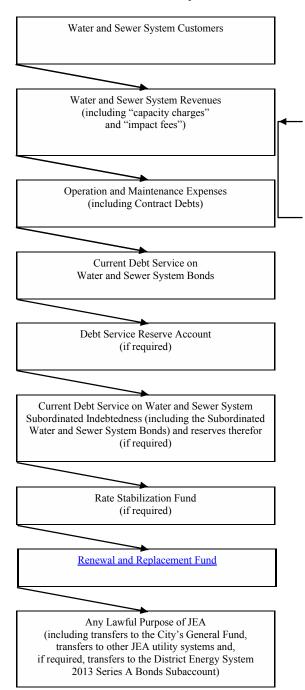
**Debt Service Coverage on Water and Sewer System Bonds and Subordinated Water and Sewer System Bonds.** The debt service coverage ratio on Water and Sewer System Bonds and Subordinated Water and Sewer System Bonds increased to 3.28 times for the Fiscal Year ended September 30, 2016 as compared to the debt service coverage ratio of 2.75 times for the Fiscal Year ended September 30, 2015, as a result of the 12.4 percent increase in net revenues available for debt service and the 5.6 percent decrease in debt service on Water and Sewer System Bonds and Subordinated Water and Sewer System Bonds between such periods.

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<u>4833-6502-8159.13</u> <u>35</u>

#### APPLICATION OF WATER AND SEWER SYSTEM REVENUES

The following chart shows a summary of the major components of the application of revenues under the Water and Sewer System Resolution.



#### DISTRICT ENERGY SYSTEM

#### **DISTRICT ENERGY FUNCTIONS**

#### General

The District Energy System provides chilled water to customers for air-conditioning. The facilities for the chilled water business consist of chilled water plants to generate chilled water and underground piping to distribute the chilled water to buildings located within the respective districts served by the plants and certain ancillary equipment. JEA's first chilled water facility became fully operational in March 2003. Since then, JEA has completed three additional facilities.

Effective as of October 1, 2004, the District Energy System was established as a separate utility system for its local district energy facilities, including the chilled water activities, and any local district heating facilities JEA may develop in the future. The establishment of the District Energy System was approved by the Council in September 2004. In February 2003, JEA's first chilled water facility commenced operation, and JEA now operates four facilities.

#### **Chilled Water Facilities**

Chilled water systems air condition buildings by circulating cold water in a continuous flow to the building. A central chilled water plant provides chilled water to buildings through an underground loop, rather than the customer installing and operating its own chiller equipment. JEA has entered into agreements with the City to provide chilled water systems to the baseball park, the arena, the Duval County Courthouse, the library and other government buildings. JEA also has contracts with private entities to serve institutional buildings and residential condominiums.

JEA's first chilled water facility, the Hogan's Creek Plant, located on Hogan Street in downtown Jacksonville, became fully operational in March 2003. At this time, the plant is serving the Baseball Grounds of Jacksonville (310 ton contract demand) and the Jacksonville Veteran's Memorial Arena (2,350 ton contract demand). The facility includes three 2,100 ton chillers, a 3,400 ton cooling tower and a one million gallon chilled water storage tank for peak demand capacity.

A second chilled water facility located on Duval Street serves five City of Jacksonville buildings including the Court House, State Attorney's Office, Library, City Hall Annex and a City garage for a total contract demand of 5,170 tons. The plant also serves the JEA downtown complex with a demand of 900 tons. The facility includes three 2,500 ton chillers, one 800 ton standby chiller and a 7,200 ton cooling tower.

JEA's third chilled water facility is located at 2103 Boulevard Avenue in the Springfield neighborhood. The Springfield facility currently serves eight locations on the UF Health Jacksonville (formerly Shands Jacksonville Medical Center) complex. The total contracted demand for the facility is 6,500 tons. The facility includes six 1,500 ton chillers and an 8,100 ton cooling tower.

A fourth chilled water facility is located on Riverplace Boulevard with two 400 ton air-cooled chillers. The total contracted demand is 594 tons at this facility, and there are no plans to pursue other customers for this facility.

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#### **Customers and Sales**

The District Energy System currently has contracts to provide 17 locations with chilled water. Total District Energy System sales revenues for the Fiscal Year Ended September 30, 2016 were approximately \$8,731,000.

## **Customer Billing Procedures**

Customers are billed on a cycle basis approximately once per month. If the customer has not paid a bill within 42 days after the initial bill date, JEA may discontinue service to that customer. Customers who meet JEA's credit criteria are not assessed a deposit. Customers who do not meet JEA's credit criteria, or do not maintain a good payment record, are assessed a deposit which may vary with consumption. A late payment fee of 1.5 percent is assessed to customers for past due balances in excess of 27 days.

#### **Rates**

District Energy System revenues are derived from two basic types of charges: (a) a demand charge based upon the customer's estimated expected yearly cooling load requirements and (b) a consumption charge based upon the actual amount of chilled water consumed by the customer. JEA has sole discretion to set rate levels and revenue requirements for the District Energy System.

Standard rates for chilled water services are based on the customer's demand and consumption of chilled water and a standard 2,400 Equivalent Full Load Hour ("EFLH") profile. EFLH is defined as the annual ton-hours of chilled water required divided by the chiller's design capacity in tons.

The following schedule reflects the rates for chilled water service:

Contract Size	Charge	Rate Effective on December 1, 2016	Rate Effective on February 1, 2016	Rate Effective on October 1, 2015	Rate Effective on July 1, 2012
> 200 tons @ \le 2,400 EFLH	Demand Charge Consumption Charge	\$20.00/ ton \$ 0.10569/ ton-hour	\$20.00/ ton \$ 0.10973/ ton-hour	\$20.00/ ton \$ 0.11624/ ton-hour	\$20.00/ ton \$ 0.11754/ ton-hour
> 200 tons @ > 2,400 EFLH	Demand Charge Consumption Charge	\$20.00/ ton \$ 0.08869/ ton-hour	\$20.00/ ton \$ 0.09273/ ton-hour	\$20.00/ ton \$ 0.09924/ ton-hour	\$20.00/ ton \$ 0.10054/ ton-hour
< 200 tons @ ≤ 2,400 EFLH	Demand Charge Consumption Charge	NONE \$ 0.19569/ ton-hour	NONE \$ 0.19973/ ton-hour	NONE \$ 0.20624/ ton-hour	NONE \$ 0.20754/ ton-hour
< 200 tons @ > 2,400 EFLH	Demand Charge Consumption Charge	NONE \$ 0.08869/ ton-hour	NONE \$ 0.09273/ ton-hour	NONE \$ 0.09924/ ton-hour	NONE \$ 0.10054/ ton-hour

#### **Permits, Licenses and Approvals**

All permits, licenses and approvals required for the operation of all of the District Energy System facilities have been obtained, and all of the facilities are operating in compliance with such permits, licenses and approvals.

## Capital Program

The District Energy System's capital program consists of capital requirements for renewal and replacement and improvements to existing facilities. The District Energy System's projected capital program for the five-year period ending September 30, 2021 is summarized below.

# District Energy System Capital Program (000's omitted)

Fiscal Year Ending September 30,	<u>Amount</u>
2017	\$ 2,403
2018	3,424
2019	1,334
2020	1,308
2021	1,783
Total	\$10,252

The total amount of the capital program for the Fiscal Years 2017 through 2021 is estimated to be approximately \$10.3 million. JEA expects the total amount required for the capital program will be derived from revenues and other available funds of the District Energy System.

#### FINANCIAL INFORMATION RELATING TO DISTRICT ENERGY SYSTEM

## **Debt Relating to the District Energy System**

#### District Energy System Bonds

As of September 30, 2016, \$39,750,000 in aggregate principal amount of bonds (the "District Energy System Bonds") issued pursuant to the resolution of JEA adopted on June 15, 2004, as amended and supplemented (the "District Energy System Resolution") was outstanding. As of the date of this Annual Disclosure Report, there is \$[38,125,000] in aggregate principal amount of District Energy System Bonds outstanding under the District Energy System Resolution.

District Energy System Bonds may be issued to finance any lawful purpose of JEA relating to the District Energy System. See "SUMMARY OF CERTAIN PROVISIONS OF THE DISTRICT ENERGY SYSTEM RESOLUTION - Additional Bonds" in APPENDIX D attached hereto.

Pursuant to the District Energy System Resolution and the laws of the State of Florida, the amount of District Energy System Bonds that may be issued by JEA is not limited and is subject only to approval by the Council and satisfaction of the conditions set forth in the District Energy System Resolution.

Pursuant to a previous Council approval, JEA currently is authorized to issue additional District Energy System Bonds for the purpose of financing the costs of additions, extensions and improvements to the District Energy System in such principal amount as shall provide JEA with "net proceeds" (defined as principal amount, less original issue discount, less underwriters' discount, less costs of issuance) of approximately \$54,321,245. JEA expects that such authorization will be adequate to enable JEA to maintain its District Energy System capital improvement program as projected through the Fiscal Year ending September 30, 2021. See "DISTRICT ENERGY SYSTEM - *DISTRICT ENERGY SYSTEM FUNCTIONS* - Capital Program" herein. In the future, JEA will continue to seek authorization as needed from the Council to issue additional District Energy System Bonds in order to enable it to finance its District Energy System capital program.

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JEA also has received approvals from the Council for the issuance of District Energy System Bonds for the purpose of refunding District Energy System Bonds. JEA may issue additional District Energy System Bonds to refund outstanding District Energy System Bonds from time to time as it deems economical or advantageous.

A summary of certain provisions of the District Energy System Resolution is attached to this Annual Disclosure Report as APPENDIX D.

#### District Energy System Contract Debts

Contract Debts, a component of the District Energy System's Operation and Maintenance Expenses, is defined by the District Energy System Resolution to mean any obligations of JEA under a contract, lease, installment sale agreement, bulk purchase agreement or otherwise to make payments out of Revenues for property, services or commodities whether or not the same are made available, furnished or received. JEA has not incurred any obligations constituting Contract Debts under the District Energy System Resolution, but it may do so in the future. All Contract Debts will be payable from the Revenues of the District Energy System prior to any payments from such Revenues for indebtedness not constituting Contract Debt issued for the District Energy System, including the District Energy System Bonds.

## **Schedules of Debt Service Coverage**

The following table sets forth Schedules of the Debt Service Coverage for the District Energy System for the years ended September 30, 2016 and September 30, 2015, respectively. Such Schedules of Debt Service Coverage were derived from supplemental information included with JEA's 2016 Financial Statements and certain other information available to JEA. Such Schedules of Debt Service Coverage should be read in conjunction with such financial statements and the notes thereto.

JEA did not issue any District Energy System Bonds during the Fiscal Year ended September 30, 2016.

## [Remainder of page intentionally left blank]

# JEA District Energy System Schedules of Debt Service Coverage (000's omitted)

_	Fiscal Year ended September <mark>30</mark> 30 <u>,</u>	
	2016	2015
Revenues:		
Services revenues	\$8,731	\$8,778
Investment income	22	5
Other	=	_
Total revenues.	8,753	8,783
Less: Operating expenses <sup>(1)</sup>	4,823	4,928
Net revenues.	\$3,930	\$3,855
Aggregate debt service	\$3,024	\$3,019
Debt service coverage <sup>2,3</sup> (2)(3)	1.30x	1.28x

Excludes depreciation.

On June 19, 2013, the closing date of the District Energy System Refunding Revenue Bonds, 2013Series A, JEA covenanted to deposit into the 2013 Series A Bonds Subaccount from Available Water and Sewer Revenues an amount equal to the Aggregate DES Service Deficiency that

exists with respect to the 2013 Series A Bonds, in the event that the amount on deposit in the Debt Service Account in the Debt Service Fund in accordance with the District Energy System Resolution is less than Accrued Aggregate Debt Service as of the last Business Day of the then current month.

Net Revenues divided by aggregate debt service. Minimum annual coverage is 1.15x.

## Management's Discussion of District Energy System Operation

**Revenues.** Total revenues decreased \$0.03 million, or 0.3 percent, to \$8.7 million for the Fiscal Year ended September 30, 2016 compared to the Fiscal Year ended September 30, 2015.

**Operating Expenses.** Operating expenses decreased \$0.11 million, or 2.1 percent, to \$4.8 million for the Fiscal Year ended September 30, 2016 compared to the Fiscal Year ended September 30, 2015.

<u>Net Revenues</u>. Net revenues increased \$0.08 million, or 1.9 percent, to \$3.93 million for the Fiscal Year ended September 30, 2016 from \$3.86 million for the Fiscal Year ended September 30, 2015, primarily related to the decrease in total revenues being proportionately less than the decrease in operating expense.

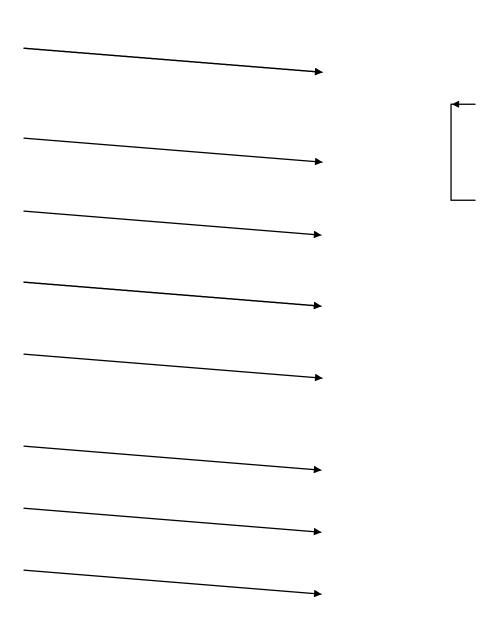
<u>Aggregate Debt Service on District Energy System Bonds.</u> Aggregate Debt Service on District Energy System Bonds remained relatively unchanged as compared to the Fiscal Year ended September 30, 2015.

**Debt Service Coverage on District Energy System Bonds.** The debt service coverage ratio on District Energy System Bonds increased slightly to 1.30 times for the Fiscal Year ended September 30, 2016 as compared to the debt service coverage ratio of 1.28 times for the Fiscal Year ended September 30, 2015 as a result of the 1.9 percent increase in net revenues available for debt service and the relatively unchanged aggregate debt service on District Energy System Bonds between such periods.

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## APPLICATION OF DISTRICT ENERGY SYSTEM REVENUES

The following chart shows a summary of the major components of the application of revenues under the District Energy System Resolution.



Revenues of the Water and Sewer System shall be deposited into a special subaccount in the Debt Service Reserve Account (the "2013 Series A Bonds Subaccount") established for the DES 2013 Series A Bonds and pledged to pay debt service on the DES 2013 Series A Bonds in the event that revenues of the District Energy System are insufficient to pay debt service on such DES 2013 Series A Bonds.

#### OTHER FINANCIAL INFORMATION

#### General

JEA maintains separate accounting records for the Water and Sewer System and the District Energy System. For purposes of financial reporting, however, JEA prepares combined financial statements that include the Electric System, the Bulk Power Supply System, JEA's interest in the Power Park, the Water and Sewer System and the District Energy System. Set forth in APPENDIX A hereto are (a) the financial statements of JEA for its Fiscal Year 2016 (which consist of the statement of net position of JEA as of September 30, 2016 and the related statement of revenues, expenses, and changes in net position and cash flows for the year then ended and the notes thereto; such financial statements are hereinafter referred to as "JEA's 2016 Financial Statements"), together with the report of Ernst & Young LLP, independent auditors, on such financial statements, (b) certain supplemental data as of September 30, 2016 and for the year then ended (which consist of the combining statement of net position, the combining statement of revenues, expenses, and changes in net position and the combining statement of cash flows) and (c) certain statements of bond compliance information (which consist of schedules of debt service coverage for the year ended September 30, 2016 for the Electric System, the Bulk Power Supply System, JEA's interest in the Power Park, the Water and Sewer System and the District Energy System), together with the report of Ernst & Young LLP, independent auditors, on such schedules. All such statements, information, data and schedules should be read in conjunction with the notes to JEA's 2016 Financial Statements, which are an integral part of the financial statements.

The assets reflected in the statement of net position included in JEA's 2016 Financial Statements include all of the assets of the Water and Sewer System, Electric System, the Bulk Power Supply System, JEA's interest in the Power Park and the District Energy System, and the liabilities reflected in such statement of net position include, among other things, the Water and Sewer System Bonds, the Subordinated Water and Sewer System Bonds, the Electric System Bonds, the Subordinated Electric System Bonds, the Power Park Issue Two Bonds, the Power Park Issue Three Bonds, the Additional Bulk Power Supply System Bonds and the District Energy System Bonds. The statement of revenues, expenses, and changes in net assets include all expenses (*e.g.*, interest charges, operating and maintenance expenses, fuel expenses) of the Water and Sewer System, the Electric System, the Bulk Power Supply System, JEA's interest in the Power Park and the District Energy System.

Except as described under the caption "INTRODUCTION - General" herein, for financing purposes, the debt of JEA relating to the Electric Utilities Functions, the debt of JEA relating to its Water and Sewer System and the debt of JEA relating to the District Energy System are payable from and secured by separate revenue sources (i.e., (a) the debt of JEA relating to its Electric Utility Functions is payable from and secured by the revenues derived by the Electric System from the sale of electricity and related services; (b) the debt of JEA relating to the Water and Sewer System is payable from and secured by the revenues derived by the Water and Sewer System from the sale of water and the provision of wastewater treatment and related services; and (c) except as described under the caption "WATER AND SEWER SYSTEM - FINANCIAL INFORMATION RELATING TO WATER AND SEWER SYSTEM FUNCTIONS - Debt Relating to Water and Sewer System Functions - Water and Sewer System Support of the District Energy System Bonds" herein, the debt of JEA relating to the District Energy System is payable from and secured by the revenues derived by the District Energy System from the sale of chilled water and related services). Accordingly, potential purchasers of the Water and Sewer System and District Energy System Bonds are advised that the information in JEA's 2016 Financial Statements relating to JEA's Electric System is not relevant to a decision to purchase the Water and Sewer System and District Energy System Bonds and should not be taken into account with respect thereto.

## **Transfers to the City**

The Charter currently provides that, as consideration for the unique relationship between the City and JEA, there shall be assessed upon JEA in each Fiscal Year, for the uses and purposes of the City, from the revenues of the Electric System and Water and Sewer System operated by JEA available after the payment of all costs and expenses incurred by JEA in connection with the operation of the Electric System and the Water and Sewer System (including, without limitation, all costs of operation and maintenance, debt service on all obligations issued by JEA in connection with such Electric System and the Water and Sewer System and required reserves therefor and the annual deposit to the depreciation and reserve account required pursuant to terms of the Charter), an amount that is periodically negotiated by JEA and the City. The City's annual assessment of JEA does not include assessments pertaining to the District Energy System. The Charter provides that the Council may reconsider the assessment calculations every five years; however, pursuant to the Charter, the Council may also revise the assessments at any time by amending the Charter with a two-thirds vote of the Council. From time to time, proposals have been made, and may be made in the future, to increase the amount of the City's annual assessment on JEA.

Effective October 1, 2008, JEA is required to pay to the City a combined assessment for the Electric System and the Water and Sewer System and this combined assessment has been set forth in the Charter.

JEA and the City reached agreement on amendments ("2016 Amendments") to the Charter which affect the amount of the combined assessment that JEA is required to pay to the City. The 2016 Amendments were set forth in Ordinance 2015-764, were approved by the Council on March 8, 2016 and took effect on March 10, 2016, and provide that effective October 1, 2016, the combined assessment for the Electric System and the Water and Sewer System will be equal, but not exceed the greater of (A) the sum of (i) the amount calculated by multiplying 7.468 mills by the gross kilowatt hours delivered by JEA to retail users of electricity in JEA's service area and to wholesale customers under firm contracts having an original term of more than one year (other than sales of energy to FPL from JEA's St. Johns River Power Park System) during the 12-month period ending on April 30 of the Fiscal Year immediately preceding the Fiscal Year for which such assessment is applicable, plus (ii) the amount calculated by multiplying 389.20 mills by the number of kgal potable water and sewer service, excluding reclaimed water service, provided to consumers during the 12-month period ending on April 30 of the Fiscal Year immediately preceding the Fiscal Year for which such assessment is applicable or (B) a minimum calculated amount which increases by 1% per year from fiscal year 2016-2017 through fiscal year 2020-2021 using the fiscal year 2015-16 combined assessment of \$114,187,538 as the base year. The amounts applicable to clause (B) above are: for fiscal year 2016-2017 - \$115,329,413; for fiscal year 2017-2018 - \$116,482,708; for fiscal year 2018-2019 - \$117,647,535; for fiscal year 2019-2020 -\$118,824,010; and for fiscal year 2020-2021 - \$120,012,250. A "mill" is one one-thousandth of a U.S. Dollar. The 2016 Amendments provide that the amended assessment calculations for the electric system and the water and sewer system shall be in effect until September 30, 2021 and that the Council may reconsider the assessment calculations after October 1, 2020 and changes, if any, shall become effective October 1, 2021. As provided in the Charter, the Council may change the assessment calculation by ordinance within the provisions of the relevant section of the Charter. The 2016 Amendments contemplate that in the event the Council does not reconsider the assessment calculations, the assessments shall be calculated using the existing formulas specified in the Charter, including a minimum calculated amount in clause (B) therein, which increases by one percent per year for each fiscal year computed as provided in the Charter.

In addition to the changes to the annual assessment, the 2016 Amendments provide that JEA, pursuant to the terms of an Interagency Agreement with the City, agrees to provide total nitrogen water quality credit to the City to assist the City in meeting its Basin Management Action Plan load reduction

goal ("BMAP Credit"). The 2016 Amendments provide that if JEA cannot provide the BMAP Credit pursuant to the terms of the Interagency Agreement, the Council and JEA shall work cooperatively to address the BMAP Credit shortfall or the Council may reconsider the assessment calculations.

In recognition of the agreement to amend the Charter as described above, JEA paid the City an additional one-time contribution in the Fiscal Year ending September 30, 2016 of \$15,000,000 (the "Additional Contribution"). The City has committed to use the Additional Contribution for City water and sewer infrastructure projects.

The portion of the budgeted aggregate assessment calculated with respect to the Water and Sewer System has increased from approximately \$22,467,356 for the Fiscal Year ended September 30, 2016 to approximately \$23,552,258 for the Fiscal Year ended September 30, 2017. While the Charter requires JEA to pay the JEA assessment to the City at such times as the City requests, but not in advance of collection, the Ordinance Code of the City requires JEA to pay the JEA assessment on a monthly basis. Pursuant to Section 21.07(f) of the Charter, although the calculation of the amounts assessed upon JEA pursuant to the Charter and the annual transfer of available revenues from JEA to the City pursuant to the Charter are based on formulas that are applied specifically to the respective utility systems operated by JEA, JEA may, in its discretion, determine how to allocate the aggregate assessment between the Electric System and the Water and Sewer System and the aggregate assessment may be paid from any available revenues of JEA.

In addition, the Charter provides that the Council shall have the power to appropriate annually a portion of the available revenues of each utility system operated by JEA (other than electric, water and sewer systems) for the uses and purposes of the City in an amount to be based on a formula to be agreed upon by JEA and the Council.

The Charter imposes a monthly Franchise Fee which JEA was required to pay to the City commencing June 1, 2008 for revenues derived effective April 1, 2008 in an amount initially equal to three percent (and not to exceed six percent, with increases requiring a request by the Mayor of the City and a two-thirds supermajority vote by the Council) of the revenues of the Electric System derived within Duval County other than the beach communities and the Town of Baldwin and subject to a per customer maximum. The Charter authorizes JEA to pass through the amount of the Franchise Fee to the customers of JEA, which JEA does. As a result, the Franchise Fee has no effect on JEA's net revenues.

## **Effect of JEA Credit Rating Changes**

## General

JEA has entered into certain agreements that contain provisions giving counterparties certain rights and options in the event of a downgrade in JEA's credit ratings below specified levels, which provisions commonly are referred to as "ratings triggers."

The table below sets forth the current ratings for JEA's Water and Sewer System Bonds and Subordinated Water and Sewer System Bonds, without giving effect to any third-party credit enhancement. Given JEA's current levels of ratings, JEA's management does not believe that the ratings triggers contained in any of its existing agreements will have a material adverse effect on its results of operations or financial condition. However, JEA's ratings reflect the views of the rating agencies and not of JEA, and therefore JEA cannot give any assurance that its ratings will be maintained at current levels for any period of time.

	Fitch Ratings	Moody's	S&P
Outstanding Water and Sewer System Bonds	AA	Aa2	AAA

## Liquidity Support for JEA's Variable Rate Bonds

In particular, JEA has entered into a credit agreement, standby bond purchase agreements and letter of credit reimbursement agreement with certain commercial banks in order to provide liquidity support in connection with tenders for purchase of the Senior Liquidity Supported Water and Sewer Bonds and the Subordinated Liquidity Supported Water and Sewer Bonds (collectively the "Liquidity Supported Bonds"). As of the date of this Annual Disclosure Report, there is \$\frac{1}{5}137,110,000\right\right\} in aggregate principal amount of Senior Liquidity Supported Water and Sewer Bonds outstanding and \$\frac{1}{1}09,435,000\frac{1}{2}\] in aggregate principal amount of Subordinated Liquidity Supported Water and Sewer The standby bond purchase agreements and reimbursement agreements, as Bonds outstanding. applicable, relating to the Liquidity Supported Bonds provide that any of such Liquidity Supported Bonds that are purchased by the applicable bank pursuant to its standby bond purchase agreement or letter of credit, as applicable, may be tendered or deemed tendered to JEA for payment upon the occurrence of certain "events of default" with respect to JEA under such standby bond purchase agreement or such reimbursement agreement, as applicable. Upon any such tender or deemed tender for purchase, such Liquidity Supported Bonds so tendered or deemed tendered will be due and payable immediately.

In general, the credit agreement and each standby bond purchase agreement and reimbursement agreement, as applicable, provides that it is an event of default on the part of JEA thereunder if the long-term ratings on the Liquidity Supported Bonds to which the credit agreement or such standby bond purchase agreement or such reimbursement agreement, as applicable, relates, without giving effect to any third-party credit enhancement, fall below "BBB-" by Fitch Ratings, "Baa3" by Moody's Investors Service ("Moody's") and / or "BBB-" by Standard & Poor's, a business of Standard & Poor's Financial Services LLC, a limited liability company, organized and existing under the laws of the State of Delaware ("S&P"), or are suspended or withdrawn (generally for credit-related reasons).

## **Interest Rate Swap Transactions**

From time to time, JEA enters into interest rate swap transactions pursuant to both its debt management policy (see "Debt Management Policy" below ) and its investment policies (see "Investment Policies" below), which interest rate swap transactions may be for the account of the Water and Sewer System. JEA had interest rate swap transactions outstanding under interest rate swap master agreements with four different counterparties in an aggregate notional amount of \$531,605,000 as of September 30, 2016, of which \$124,020,000 were for the account of the Water and Sewer System. For additional information concerning those interest rate swap transactions, see (a) "Debt Management Policy" below, (b) "Investment Policies" below and (c) Notes 1(k) and 8 to JEA's 2016 Financial Statements set forth in APPENDIX A attached hereto.

Under each master agreement, the interest rate swap transactions entered into pursuant to that master agreement are subject to early termination upon the occurrence and continuance of certain "events of default" and upon the occurrence of certain "termination events." One of such "termination events" with respect to JEA is a suspension or withdrawal of certain credit ratings with respect to JEA or a downgrade of such ratings to below the levels set forth in the master agreement or in the confirmation related to a particular interest rate swap transaction. Upon any such early termination of an interest rate swap transaction, JEA may owe to the counterparty a termination payment, the amount of which could be substantial. The amount of any such potential termination payment would be determined in the manner provided in the applicable master agreement and would be based primarily upon market interest rate levels and the remaining term of the interest rate swap transaction at the time of termination. In general,

the ratings triggers on the part of JEA contained in the master agreements range from (x) below "BBB" by S&P and below "Baa2" by Moody's to (y) below "A-" by S&P and below "A3" by Moody's.

Additionally, the master agreement between JEA and Merrill Lynch Derivative Products AG ("MLDP") for the account of the Water and Sewer System contains an automatic transfer provision triggered by a certain rating downgrade or downgrades, as applicable, of JEA or Merrill Lynch Derivative Products AG. Under certain circumstances if the rating on JEA's senior lien Water and Sewer System Bonds or the long-term, unsecured, unsubordinated debt rating or financial program rating of Merrill Lynch Derivative Products AG were to fall below the double-A category, all rights and obligations of Merrill Lynch Derivative Products AG under the master agreement and all transactions under the master agreement would be automatically assigned and delegated to Merrill Lynch Capital Services, Inc. ("MLCS"). MLCS has entered into an agreement with JEA to cause a guarantee from Merrill Lynch & Co. to be delivered to JEA after the assignment occurs and such guarantee will guarantee the payments of MLCS under the master agreement to JEA. S&P downgraded MLDP to "A+" on August 5, 2013, triggering the assignment to MLCS and the Merrill Lynch & Co. guarantee described above.

As of September 30, 2016, JEA's estimated aggregate exposure under all of its then outstanding interest rate swap transactions (*i.e.*, the net amount of the termination payments that JEA would owe to its counterparties if all of the interest rate swap transactions were terminated) was \$181,794,000, of which \$35,986,000 was attributable to interest rate swap transactions entered into for the account of the Water and Sewer System. As of March 31, 2017, JEA's estimated aggregate exposure under all of its then outstanding interest rate swap transactions was \$[167,867,000],119,614,000, of which \$[32,296,000]21,833,000] was attributable to interest rate swap transactions entered into for the account of the Water and Sewer System.

In connection with the issuance or proposed issuance of certain of JEA's bonds, JEA has entered into various floating-to-fixed rate interest rate swap transactions for the account of the Water and Sewer System. These swap transactions are entered into with various providers and are otherwise described in the table below.

Related Bonds	Counterparty	Initial Notional <u>Amount</u>	Notional Amount as of_ <u>March 31, 2017</u>	Fixed Rate of Interest	Variable <u>Rate Index<sup>(1)</sup></u>	Termination <u>Date<sup>(2)</sup></u>
Water and Sewer System Revenue Bonds, 2006 Series B	Morgan Stanley Capital Services, Inc.	\$38,730,00 0	\$34,625,000	3.92-4.09%	CPI Index	10/1/2017 to 10/1/2022
Variable Rate Water and Sewer System Revenue Bonds, 2008 Series B	Merrill Lynch Capital Services, Inc.	\$85,290,00 0	\$85,290,000	3.895%	BMA Municipal Swap Index	10/1/2041

<sup>(1)</sup> The BMA Municipal Swap Index is now known as the SIFMA Municipal Swap Index.

<sup>(2)</sup> Unless earlier terminated.

## **Debt Management Policy**

JEA's debt management policy applies to all current and future debt and related hedging instruments issued by JEA. The policy is designed to provide both broad policy guidance and facilitate management, control and oversight of JEA's debt function, thus fostering ongoing access to the capital markets in order to fund future capital projects of JEA.

The counterparties with whom JEA may deal must meet the requirements for counterparties described under the caption "Investment Policies" below. The policy requires JEA staff to submit to the JEA Board an annual plan of finance, which will address, at a minimum, the amount of debt projected to be issued during the next Fiscal Year, whether such debt is senior or subordinated, whether such debt is fixed or variable, and whether any hedging instruments may be utilized. Under the policy, JEA's net variable rate debt will not exceed 30 percent of total debt and JEA's net variable rate debt plus net fixed-to-floating interest rate swaps will not exceed 55 percent of total debt. "Net variable rate debt" is actual variable rate debt minus net variable rate assets. "Net variable rate assets" is actual variable rate assets minus the notional amount of investment/asset-matched interest rate swaps. "Net fixed-to-floating interest rate swaps" is the aggregate notional amount of fixed-to-floating swaps maturing in 10 years or less minus the aggregate notional amount of floating-to-fixed swaps maturing in 10 years or less outstanding on the last day of each month. "Total debt" equals fixed rate debt plus variable rate debt. "Variable rate assets" are investments maturing in less than one year. "Variable rate debt" is actual variable rate debt outstanding less variable rate debt that is associated with a floating-to-fixed rate swap where the term of the swap matches the term of the variable rate debt. The percentages are to be computed monthly.

JEA's fixed rate debt, variable rate debt and debt-related hedging instruments are to be managed in conjunction with investment assets and investment-related hedging instruments to incorporate the natural occurrence of hedging impacts in those balance sheet categories. The purpose is to use each side of the balance sheet to mitigate or hedge cash flow risks posed by the other side of the balance sheet.

The policy creates procedures to be followed in conjunction with the issuance of fixed rate debt, variable rate debt and debt refundings. Beginning in the Fiscal Year ended September 30, 2010, deposits were made to the Rate Stabilization Fund for the Debt Management Strategy Reserve and reflect the difference in the actual interest rates for interest expense on the unhedged variable rate debt as compared to the budgeted assumptions for interest expense on the unhedged variable rate debt. At a minimum, 50 percent of the calculated reserve will be recorded and deposited each fiscal year. An additional amount, up to the full value of the calculated reserve (the remaining 50 percent), will be reviewed by the Debt and Investment Committee and recorded at their option. However, the amount deposited to the Rate Stabilization Fund (in addition to actual debt service costs for the fiscal year) cannot exceed the total amount of the budgeted debt service. The reserve will be calculated on a system by system basis; however, based on the calculation, any mandatory deposit will exclude the District Energy System. The reserve is capped at five percent of the par amount of the total outstanding variable rate debt. Withdrawals from the Debt Management Strategy Stabilization Fund for debt management strategy can be used for any lawful purpose including debt service, debt repayment, and capital outlay and must be approved in writing by the Managing Director and Chief Executive Officer. Under JEA's pricing policy, withdrawals from the Debt Management Strategy Stabilization Fund are limited to expenses related to market disruption in the capital markets, disruption in availability of credit or unanticipated credit expenses, or to fund variable interest costs in excess of budget. Any amounts withdrawn for these costs will subsequently be presented for approval by the Board.

The policy establishes a framework for JEA's utilization of hedging instruments including interest rate swaps and caps and collars. The utilization of hedging instruments offers JEA a cost

effective alternative to traditional debt financing choices. JEA is authorized to enter into floating-to-fixed rate swaps, fixed-rate-to-floating rate swaps and basis swaps (*i.e.*, swaps which seek to manage the risk associated with the mismatch between two benchmarks used to set the indices utilized in an interest rate swap transaction). The percentage of variable rate exposure (the notional amount of net fixed-to-floating interest rate swaps and net variable rate debt outstanding) to total debt outstanding may not exceed 55 percent. The notional amount of interest rate swaps, caps, collars and related hedging instruments is limited to the amount approved by the JEA Board from time to time.

Interest rate caps and related hedging instruments are to be utilized to help JEA manage interest rate risk in its debt management program. Generally, a fixed-to-floating interest rate swap will have an associated interest rate cap for the same notional amount at a level no greater than 200 basis points above the interest rate swap fixed rate. It is also contemplated that an interest rate cap will not always have the same maturity as the interest swap with which it is associated. The average life of the aggregate of outstanding caps will not be less than 75 percent of the average life of the associated aggregate swaps.

The policy sets out various decision rules which govern the decision to execute various hedging instruments. Valuations are performed on a quarterly basis and adjustments to fair value are included in JEA's financial statements.

The policy calls for no more than \$500,000,000 of net interest rate swap and cap or other hedging instruments to be outstanding in the aggregate with any one provider or affiliate thereof. The aggregate amount of all "long dated" (greater than 10 years) transactions executed with financial institutions and all affiliates thereof, shall be limited to an amount based on the credit rating of the financial institution at the time of the entry into the long dated hedging transaction as shown below:

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

The ratings criteria shown above apply either to the counterparty to the long dated transaction or, if the payment obligation of such counterparty under the relevant swap agreement shall be guaranteed by an affiliate thereof, such affiliate. The overall maximum by definition of the above limits cannot exceed \$400,000,000 for long dated transactions.

These diversification requirements include all interest rate swap, cap and other hedging instruments JEA may utilize to manage interest rate risks including, but not limited to, debt management and 100 percent investment/asset-matched program. Interest rate swap and cap transactions are to be competitively bid (unless otherwise determined by the Managing Director and Chief Executive Officer) by at least three providers that have executed interest rate swap agreements with JEA.

Under the policy, an annual budgeted reserve contribution is to be made to a reserve fund. The contributions to the reserve fund will be funded in three equal installments of 1 percent of the notional amount beginning in the month the swap is executed. Once funded, the reserve fund shall at all times be not less than three percent of the notional amount of fixed-to-floating rate debt interest rate swaps outstanding, but can be used for any lawful purpose as approved by JEA's Managing Director and Chief Executive Officer.

The aggregate notional amount of all hedging instrument transactions entered into for the account of the Water and Sewer System outstanding at any one time, net of offsetting transactions, under all swap agreements is established at not to exceed (A) \$600,000,000 in the case of interest rate swaps, (B) \$250,000,000 in the case of basis swaps and (C) \$400,000,000 in the case of caps and collars. A

transaction that reverses an original transaction in every respect thereby offsetting the cashflows perfectly is referred to herein as an "offsetting transaction." Generally, in the past JEA has elected to receive or pay an upfront cash payment to reverse the original swap transaction. The phrase "net of offsetting transactions" would relate to reversals that remain on JEA's books if JEA elected not to take/make an upfront cash payment.

#### **Investment Policies**

The goals of JEA's investment policy are to (i) provide safety of capital, (ii) provide sufficient liquidity to meet anticipated cash flow requirements, and (iii) maximize investment yields while complying with the first two goals. Sound investment management practices help maintain JEA's competitive position since investment income reduces utility rates. JEA's funds are invested only in securities of the type and maturity permitted by its bond resolutions, Florida statutes, its internal investment policy and federal income tax limitations. JEA does not speculate on the future movement of interest rates and is not permitted to utilize debt leverage in its investment portfolio. Debt leverage is the practice of borrowing funds solely for the purpose of reinvesting the proceeds in an attempt to earn more income than the cost of the debt.

JEA invests its funds pursuant to Section 218.415, Florida Statutes, its various bond resolutions and its JEA Board-approved investment policy. As of September 30, 2016, 54 percent of JEA's total investment portfolio (including funds held under the Water and Sewer System Resolution, the Subordinated Water and Sewer System Resolution, the District Energy System Resolution, the Bulk Power Supply System Resolution, the Electric System Resolution, the Subordinated Electric System Resolution, the First Power Park Resolution and the Second Power Park Resolution) was invested in securities issued by the United States Government, federal agencies or state and local government entities and has a weighted average maturity of approximately 3.0 years. As of September 30, 2016, the remaining 46 percent of such investment portfolio was invested in commercial paper rated at least "A-1" and "P-1" by S&P and Moody's, respectively, having a weighted average maturity of less than 120 days, in money market mutual funds and in demand deposit bank accounts. JEA's funds that are invested in commercial paper, in money market mutual funds and in bank accounts are used primarily for operating expenses.

JEA has entered into securities lending agreements in the past wherein from time to time JEA loaned certain securities in exchange for eligible collateral consisting of United States Government and federal agency securities whose market values were at least 103 percent of the market values of the loaned securities which were re-priced daily. JEA earned a fee in connection with such securities lending agreements, which augmented its portfolio yield. Although JEA currently does not have any securities held pursuant to its securities lending program, JEA may enter into similar securities lending agreements in the future.

JEA previously implemented a strategy to lengthen synthetically the investment maturity of its short-term revolving funds by entering into 100 percent asset-matched interest rate swap transactions. Through the use of this strategy, JEA may lock-in a fixed rate of return for up to five years on those funds, such as debt service sinking funds, that it is permitted to invest only in short-term investment securities. As of September 30, 2016, JEA had, and as of the date of this Annual Disclosure Report, JEA has, no outstanding interest rate swap transactions for this purpose, although it may enter into interest rate swap transactions for this purpose in the future.

The JEA Board has established limits on the notional amount of JEA's interest rate swap transactions and standards for the qualification of financial institutions with whom JEA may enter into interest rate swap transactions. The counterparties with whom JEA may deal must be rated (i) "AAA/Aaa" by one or more nationally recognized rating agencies at the time of execution, (ii)

"AA-/Aa3" or better by at least two of such credit rating agencies at the time of execution, or (iii) if such counterparty is not rated "A/A2" or better at the time of execution, ("AA-/Aa3" or better for interest rate swap transactions entered into prior to 2014), provide for a guarantee by an affiliate of such counterparty rated at least "A/A2" or better at the time of execution where such affiliate agrees to unconditionally guarantee the payment obligations of such counterparty under the swap agreement. In addition, swap agreements generally will require the counterparty to enter into a collateral agreement to provide collateral when (a) the ratings of such counterparty (or its guarantor) fall below "AA-/Aa3" by two rating agencies and (b) a termination payment would be owed to JEA.

JEA's payment obligations under the interest rate swap transactions consist of periodic payments based upon fluctuations in interest rates and, in the event of a termination of a transaction prior to the stated term thereof, potential termination payments. The amounts of such potential termination payments are based primarily upon market interest rate levels and the remaining term of the transaction at the time of termination. JEA is authorized to enter into both (a) interest rate swap agreements the obligations of JEA under which are payable from available funds of the Electric System ("Electric System Swap Agreements") and (b) interest rate swap agreements the obligations of JEA under which are payable from available funds of the Water and Sewer System ("Water and Sewer System Swap Agreements").

In the case of interest rate swap transactions entered into pursuant to Water and Sewer System Swap Agreements, JEA's payment obligations thereunder are payable following the payment of the operation and maintenance expenses of the Water and Sewer System, including any Contract Debts of the Water and Sewer System, debt service on Water and Sewer System Bonds, debt service on any Subordinated Indebtedness of the Water and Sewer System (including Subordinated Water and Sewer System Bonds) and the deposits to the Renewal and Replacement Fund established by the Water and Sewer System Resolution.

Interest rate swap transactions for the account of the Water and Sewer System may be entered into pursuant to either Water and Sewer System Swap Agreements or Electric System Swap Agreements. In the case of interest rate swap transactions for the account of the Water and Sewer System that are entered into pursuant to Electric System Swap Agreements, JEA has established procedures pursuant to which (a) all amounts received by JEA pursuant to such interest rate swap transactions are transferred to the Revenue Fund established pursuant to the Water and Sewer System Resolution and (b) all payments required to be made by JEA pursuant to such interest rate swap transactions are paid for from Revenues of the Water and Sewer System; *provided*, *however*, that no such payments may be made from Revenues of the Water and Sewer System until payment (or provision for payment) has been made of the operation and maintenance expenses of the Water and Sewer System, including any Contract Debts of the Water and Sewer System, debt service for the Water and Sewer System Bonds, debt service for any Subordinated Indebtedness of the Water and Sewer System (including the Subordinated Water and Sewer System Bonds) and the deposits to the Renewal and Replacement Fund established by the Water and Sewer System Resolution.

For further information regarding this interest rate swap program, see Notes 1(k) and 8 to JEA's 2016 Financial Statements set forth in APPENDIX A attached hereto.

# **Revolving Credit Facilities**

Effective December 17, 2015, JEA entered into a revolving credit agreement with JPMorgan Chase Bank, National Association for a \$300,000,000 commitment (the "Revolving Credit Facility"). The Revolving Credit Facility is scheduled to expire on December 17, 2018. Subject to meeting various conditions, the Revolving Credit Facility is available to JEA to provide working capital and short-term and interim financing for capital projects in connection with any of its systems. Payment obligations allocable to the Electric System, Power Park (under the Second Power Park Resolution) and the Bulk

Power System under the Revolving Credit Facility are payable from the respective revenues of the Electric System, Power Park (under the Second Power Park Resolution) and the Bulk Power Supply System, as applicable, but are subordinate to the payment of JEA's Electric System, Power Park and Bulk Power Supply System debt (including the Electric System Bonds, the Subordinated Electric System Bonds, the Power Park Issue Three Bonds, and the Additional Bulk Power Supply System Bonds). As of the date of this Annual Disclosure Report, JEA has \$3,000,000 in borrowings outstanding under the Revolving Credit Facility, which are for the account of the Water and Sewer System.

# [Remainder of page intentionally left blank]

# **Loans Among Utility Systems**

Pursuant to the Charter, JEA has the authority to lend money from one of its utility systems to another of its utility systems under terms and conditions as determined by JEA. As of the date of this Annual Disclosure Report, no loans among the systems are outstanding.

#### **No Default Certificates**

Section 714.2 of the Water and Sewer System Resolution and Section 7.07 of the Subordinated Water and Sewer Resolution require that JEA annually obtain a certificate of its independent firm of certified public accountants stating whether or not, to the knowledge of the signer, JEA is in default with respect to any of the covenants, agreements or conditions on its part contained in the Water and Sewer System Resolution and the Subordinated Water and Sewer System Resolution, respectively, and if so, the nature of such default. Section 713.2 of the District Energy System Resolution requires that JEA annually obtain a certificate of its independent firm of certified public accountants stating whether or not, to the knowledge of the signer, JEA is in default with respect to any of the covenants, agreements or conditions on its part contained in the District Energy System Resolution, and if so, the nature of such default. The actual certificates provided by such accountants state that nothing has come to such accountants' attention that caused such accountants to believe that JEA failed to comply with the terms, covenants, provisions or conditions of the applicable section(s) of the relevant resolutions, insofar as they relate to accounting matters (emphasis supplied). The accountants have advised JEA that the italicized qualifying language is required to be included by their professional standards (specifically, Statement on Auditing Standards No. 62). JEA does not believe that any other nationally-recognized accounting firm will provide certificates that strictly meet the requirements of the applicable section(s) of the relevant resolutions and that differ materially from the certificates provided by JEA's accountants.

Notwithstanding the failure of the accountants' certificates to strictly meet the requirements of the respective resolutions as described herein, as of the date of this Annual Disclosure Report, JEA is not in default in the performance of any of the covenants, agreements or conditions contained in the Water and Sewer System Resolution, Subordinated Water and Sewer Resolution and the District Energy System Resolution.

## **Impact of Hurricane Matthew**

On Friday October 7, 2016, Hurricane Matthew, a category 3 hurricane, impacted Northeast Florida. The storm caused widespread damage throughout the greater Jacksonville area and to JEA's Electric System and Water and Sewer System, resulting in electric outages to 245,000 customers and 69 sanitary sewer overflows ("SSOs"). Electric System damage was primarily limited to the distribution grid. Electrical supply interruptions and backup electrical supply faults at wastewater pump stations were the primary causes of the SSOs. Approximately 90 percent of JEA's electric customers had power by the evening of Monday October 10, 2016. Restoration of power to the last of the remaining Electric System customers was completed by Saturday, October 15, 2016.

JEA estimates that its costs and expenses resulting from Hurricane Matthew will total approximately \$20 million, of which approximately \$17.6 million is attributable to the Electric System and approximately \$2.4 million is attributable to the Water and Sewer System. JEA expects to recover approximately \$18.6 million of storm-related costs from the following three sources: (1) approximately \$8.7 million from the Federal Emergency Management Agency ("FEMA"); (2) approximately \$1.4 million from the State of Florida (the "State"); and (3) approximately \$8.5 million from claims made on JEA's property insurance policy; the remaining approximately \$1.4 million is expected to be paid from JEA's \$10 million self-insurance reserves.

The actual amounts and timing for receipt of funds from its property insurance, the State and FEMA cannot be predicted at this time. JEA currently believes that it has sufficient operating cash available to meet its requirements during this time.

## LITIGATION

In the opinion of the Office of General Counsel of the City, there is no pending litigation or proceedings that may result in any material adverse change in the financial condition of JEA relating to the Water and Sewer System or the District Energy System other than as set forth in the financial statements of JEA in Appendix A of this Annual Disclosure Report and other than the matters set forth in this Annual Disclosure Report. Although it does not fall within the category of pending litigation or proceedings mentioned in the preceding sentence, there is a case pending in federal court relating to the installation and use of the Precision Flow System at certain Mid-America Apartment properties in the The claims against both the City and JEA are in the aggregate amount of Jacksonville area. approximately \$75 million and are for defamation, tortious interference with a contractual relationship (with Mid-America Apartment Communities Inc.) and tortious interference with an advantageous business relationship (with St. Johns County). While the litigation is in its early stages, each of the City and JEA believe it has good and meritorious defenses (sovereign immunity, among others) and will vigorously defend the action. Additionally, under Florida law any tort-related claims against the City and JEA have a liability limitation for the City and JEA equal to a maximum amount of \$300,000 per tort-related claim.

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# **AUTHORIZATION**

The dissemination and use of this Annual Disclosure Report have been duly authorized by the JEA Board.

JEA	
By: <u>Burr</u> _	/s/ <del>[Thomas F. Petway III] Edward E.</del> Chair
By:	/s/ Paul E. McElroy ging Director and Chief Executive Officer

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ANNUAL DISCLOSURE REPORT
FOR
ELECTRIC UTILITY SYSTEM
FOR
FISCAL YEAR
ENDED
SEPTEMBER 30, 2016

(Prepared pursuant to certain continuing disclosure undertakings relating to the Bonds listed in APPENDIX I hereto)

Filed with EMMA

Dated as of

April \_\_\_\_, 2017

# JEA 21 W. CHURCH STREET JACKSONVILLE, FLORIDA 32202 (904) 665-7410

(http://www.jea.com)

#### **JEA OFFICIALS**

## **BOARD MEMBERSHIP**

Chair FEdward E.

Petway III Burr

Vice Chair <u>[Edward EG. Burr]Alan</u>

<u>Howard</u>

Secretary

Delores P. Kesler
Husein A. Cumber
Kelly Flanagan
G. Alan Howard
Frederick D. Newbill
Thomas F. Petway III

**MANAGEMENT** 

Managing Director and Chief Executive Officer
Vice President / General Manager, Electric Systems
Mich.
Vice President / General Manager, Water / Wastewater Systems
Chief Financial Officer
Chief Compliance Officer
Chief Customer Officer
Chief Human Resources Officer
Chief Information Officer
Chief Legal Officer
Jody

Chief Public Affairs Officer

Treasurer

Paul E. McElroy Michael J. Brost Brian J. Roche Melissa H. Dykes Ted E. Hobson Vacant Angelia R. Hiers

Paul J. Cosgrave Jody L. Brooks Michael R. Hightower Joseph E. Orfano

## **GENERAL COUNSEL**

Jason R. Gabriel, Esq. General Counsel of the City of Jacksonville Jacksonville, Florida

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ANNUAL DISCLOSURE REPORT
FOR
ELECTRIC UTILITY SYSTEM
FOR
FISCAL YEAR
ENDED
SEPTEMBER 30, 2016

#### INTRODUCTION

#### General

This Annual Disclosure Report for Electric Utility System for Fiscal Year Ended September 30, 2016 (together with the Schedule and the Appendices hereto, this "Annual Disclosure Report") is furnished by JEA to provide information concerning (a) JEA, (b) JEA's electric utility operations, and (c) outstanding debt of JEA relating to its electric utility operations. This Annual Disclosure Report is being filed with the Municipal Securities Rulemaking Board (the "MSRB"), through the MSRB's Electronic Municipal Market Access ("EMMA") website currently located at <a href="http://emma.msrb.org">http://emma.msrb.org</a> pursuant to certain continuing disclosure undertakings made by JEA in accordance with the provisions of Rule 15c2-12, as amended ("Rule 15c2-12"), promulgated by the United States Securities and Exchange Commission (the "SEC") pursuant to the Securities Exchange Act of 1934, as amended. The bonds to which such continuing disclosure undertakings relate (including the CUSIP numbers thereof) are listed in APPENDIX I hereto. As permitted by the provisions of Rule 15c2-12, this Annual Disclosure Report also is intended to be included by reference in official statements and other offering and remarketing documents prepared by JEA in connection with (a) the sale and issuance, after the date hereof, of certain securities of JEA and (b) the remarketing in the secondary market, after the date hereof, of certain securities of JEA and (b) the remarketing in the secondary market, after the date hereof, of certain

JEA is a body politic and corporate organized and existing under the laws of the State of Florida and is an independent agency of the City of Jacksonville, Florida (the "City"). The City is a consolidated city-county local government for Duval County, located in Northeast Florida. The governing body of JEA (the "JEA Board") consists of seven members appointed by the Mayor of the City and confirmed by the City Council of the City (the "Council"). JEA (then known as Jacksonville Electric Authority) was established in 1968 to own and manage the electric utility which had been owned by the City since 1895 (the "Electric System"). In 1997, the Council amended the Charter of the City (the "Charter") in order to authorize JEA to own and operate additional utility functions and, effective on June 1, 1997, the City transferred to JEA the City's combined water and sewer utilities system (the "Water and Sewer System"). Effective as of October 1, 2004, JEA established a separate utility system (the "District Energy System") for its local district energy facilities, including its chilled water activities and any local district heating facilities JEA may develop in the future. JEA operates and maintains its records on the basis of a fiscal year ending on each September 30th (a "Fiscal Year").

Each of the Electric System, the Water and Sewer System and the District Energy System is owned and operated by JEA separately. For information relating to JEA's Water and Sewer System and District Energy System see the "ANNUAL DISCLOSURE REPORT FOR WATER AND SEWER SYSTEM AND DISTRICT ENERGY SYSTEM FOR FISCAL YEAR ENDED SEPTEMBER 30, 2016"

(the "Water and Sewer/DES ADR"), available from the Municipal Securities Rulemaking Board's Electronic Municipal Market Access (EMMA) website at <a href="http://emma.msrb.org">http://emma.msrb.org</a>. The revenues of each system do not constitute revenues of the other two systems, and revenues of the Electric System are not pledged to the payment of any debt issued or to be issued by JEA to finance and refinance the other two systems. JEA may, however, satisfy its annual obligation to transfer funds to the City with funds derived from any of its utilities systems. See "OTHER FINANCIAL INFORMATION - Transfers to the City" herein.

For purposes of this Annual Disclosure Report, the Electric System, JEA's interest in the St. Johns River Power Park Units 1 and 2 (such generating station, the "Power Park" or "SJRPP") and the Scherer 4 Project (hereinafter defined) are referred to collectively as JEA's "Electric Utility Functions." This Annual Disclosure Report contains information regarding JEA's Electric Utility Functions. For financing purposes the debt of JEA relating to its Electric Utility Functions is payable from and secured by the revenues derived by JEA from the sale of electricity and related services (including, in the case of certain debt of JEA relating to the Power Park referred to herein as the Power Park Issue Two Bonds, revenues received by JEA from the sale of a portion of JEA's capacity (and associated energy) of the Power Park to Florida Power & Light Company ("FPL"). Accordingly, the information contained herein relating to JEA's Electric Utility Functions is not relevant to the Water and Sewer System Bonds, the Subordinated Water and Sewer System Bonds or the District Energy System Bonds and should not be taken into account in evaluating such debt.

The summaries of or references to the Electric System Resolution, the Subordinated Electric System Resolution, the First Power Park Resolution, the Second Power Park Resolution, and the Restated and Amended Bulk Power Supply System Resolution, and certain proposed amendments thereto, where applicable, (as such terms are hereinafter defined) and certain statutes and other ordinances and documents included in this Annual Disclosure Report do not purport to be comprehensive or definitive; and such summaries and references are qualified in their entirety by references to each such resolution, statute, ordinance, and document. Copies of the resolutions are available on the JEA website at <a href="https://www.jea.com/About/Investor\_Relations/Bonds.aspx">https://www.jea.com/About/Investor\_Relations/Bonds.aspx</a> and the other documents referred to in this Annual Disclosure Report may be obtained from JEA; *provided* that a reasonable charge may be imposed for the cost of reproduction.

## **JEA Establishment and Organization**

JEA was established in 1968 to own and manage the electric utility which had been owned by the City since 1895. The City's Charter was amended in 1997 to authorize JEA to own and operate other utility systems, including the Water and Sewer System. In 2004, the City authorized JEA to create the District Energy System. The JEA Board consists of seven members appointed by the Mayor of the City, subject to confirmation by the Council. The members serve without pay for staggered terms of four years each, with a maximum of two consecutive full terms each.

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Current members of the JEA Board, their occupations and the commencement and expiration of their terms are as follows:

<u>MEMBER</u>	<u>OCCUPATION</u>	<u>TERM</u>
Thomas F. Petway II Chair	Founder and Member of the Board of Directors US Assure, Inc.	October 28, 2015 - February 28, 2018
Edward E. Burr <del>Vice</del> -Chair	President & CEO GreenPointe Holdings, LLC	[November 25, 2015 - [February 28, 2021]
G. Alan Howard Vice Chair	Founder & President Milam Howard Nicandri Dees and Gillam, P.A.	February 10, 2016 - February 28, 2019
Delores P. Kesler Secretary	Chairman & CEO Adium, LLC	October 28, 2015 - February 28, 2020
Husein A. Cumber	Executive Vice President for Corporate Development Florida East Coast Industries, Inc.	February 28, 2014 - February 28, 2018
Kelly Flanagan	Senior Vice President & CFO Jacksonville Jaguars, LLC	November 25, 2015 - February 28, 2020
G. Alan Howard	Founder & President Milam Howard Nicandri Dees and Gillam, P.A.	February 10, 2016 February 28, 2019
Frederick D. Newbill	Pastor, First Timothy Baptist Church	January 12, 2017 - February 28, 2019
Thomas F. Petway III	Founder and Member of the Board of Directors US Assure, Inc.	October 28, 2015 - February 28, 2018

In addition, in accordance with the provisions of the interlocal agreement entered into between JEA and Nassau County, Florida in connection with JEA's acquisition of certain assets and franchises of a private water and sewer utility in Nassau County, Nassau County is entitled to appoint a non-voting representative to the JEA Board. The Nassau County representative is entitled to attend all JEA Board meetings and to participate in discussions concerning matters that affect the provision of water and sewer services within Nassau County. Nassau County has appointed Mike Mullin, a Commissioner on Nassau County's Board of County Commissioners, as its representative to the JEA Board.

The Charter authorizes JEA to construct, acquire (including acquisition by condemnation), establish, improve, extend, enlarge, maintain, repair, finance, manage, operate and promote its utilities systems (which consist of (1) the Electric System, (2) the Water and Sewer System, (3) the District Energy System and (4) any additional utilities systems which JEA may undertake in the future upon satisfaction of the conditions set forth in the Charter), and to furnish electricity, water, sanitary sewer service, natural gas and other utility services as authorized therein within and outside of the City and for said purposes to construct and maintain electric lines, pipelines, water and sewer mains, natural gas lines and related facilities along all public highways and streets within and outside of the City. The Charter also confers upon JEA the power to sue, to enter into contracts, agreements and leases, and to sell revenue bonds to finance capital improvements and to refund previously issued evidences of indebtedness of JEA.

In addition to the powers conferred upon JEA by the Charter, the Bulk Power Act authorizes JEA to acquire, own and operate as separate bulk power supply utilities or systems, electric generating plants

and transmission lines within the City and within and outside of the State of Florida. JEA's interests in the Power Park and the Scherer 4 Project are separate bulk power supply systems pursuant to the Bulk Power Act. JEA may develop other separate bulk power supply systems in connection with future generation and/or transmission projects. JEA has launched several initiatives to provide revenue diversity. Included in these initiatives are natural gas sales to commercial and industrial customers (See "ELECTRIC UTILITY SYSTEM - ELECTRIC UTILITY FUNCTIONS – Electric System – Natural Gas Sales" herein), forestry management of JEA owned conservation lands, leasing of dark fiber and space on communication towers, transmission and distribution poles and partnering with the North Florida Transportation Planning Organization to encourage electrification.

# **Management and Employees**

The Charter assigns responsibility for the management of JEA's utilities systems to the JEA Board. JEA employs a Managing Director and Chief Executive Officer as its chief executive officer. The Managing Director, executive officers, vice presidents, directors, managers, executive assistants and other appointed staff, numbering approximately 380 persons, form the management team (the "Management Team") and are not subject to the City's civil service system.

# Management

The Managing Director and Chief Executive Officer of JEA and the nine executive officers of JEA are:

**Paul E. McElroy, Managing Director and Chief Executive Officer.** The JEA Board of Directors named Mr. McElroy the company's seventh Chief Executive Officer effective October 1, 2012. From January 1, 2006 to October 1, 2012, he served as JEA's Chief Financial Officer. Prior to that, he served as JEA's Vice President, Financial Services.

Mr. McElroy currently serves on the boards of the University of North Florida, The Energy Authority, Inc. ("TEA"), Florida Reliability Coordinating Council, Northeast Florida Safety Council, Inc., and the Jacksonville Chamber of Commerce. Mr. McElroy is a member of the American Public Power Association Board's Executive Committee and serves as Treasurer, as well as Chair of the Finance and Audit Committee and Chair of the Retirement Committee. He is also a member of the Large Public Power Council CEO Roundtable.

Mr. McElroy holds a Bachelor of Science in accounting from St. Joseph's College in Rensselaer, Indiana and a certificate from the Advanced Management Program of the Wharton School of the University of Pennsylvania and pursued graduate level studies at the University of Bridgeport and the University of New Haven in Connecticut.

Before joining JEA, Mr. McElroy served as a Vice President and General Manager for Bombardier Capital Corporation in Jacksonville, Florida and Colchester, Vermont. Prior to that, he served in a variety of management positions with Pitney Bowes Credit Corporation, including Controller, Director - Marketing and Vice President, Internal Finance Division in Norwalk, Connecticut.

*Michael J. Brost, Vice President / General Manager, Electric Systems*. Mr. Brost has lead responsibility for producing and delivering electricity to JEA's 450,000 electric customers in a safe, reliable and cost-competitive manner, and in full compliance with regulatory objectives. In this role, Mr. Brost and his team are responsible for planning, constructing, operating and maintaining JEA's electric system—the generation plants and the transmission, substations and distribution systems.

Mr. Brost joined JEA in 1983 as an electrical engineer in System Operations. In 1993, he was appointed Division Chief of Distribution Engineering and was soon promoted to Vice President of the Distribution Group. He was a founding member of JEA's Corporate Strategy Team and has held vice president positions in the areas of Organizational Development and Organizational Services. He also served as the President and CEO at Colectric Partners in 2007 and 2008. Mr. Brost is a licensed Professional Engineer in the State of Florida. He has an M.S. degree in Engineering and an MBA. He also serves on several local nonprofit boards.

**Brian J. Roche, Vice President / General Manager, Water / Wastewater Systems.** Mr. Roche is responsible for the planning, engineering, construction, operation and maintenance of JEA's Water, Wastewater, Reclaimed Water and District Energy systems in a safe, reliable and cost-competitive manner, and in full compliance with regulatory objectives.

Mr. Roche joined JEA in 1983 as a co-op student and has 25 years' experience at JEA in roles across the organization including serving as a project engineer for electric generating stations, an account executive for industrial customers, a wastewater planner, the Director of Meter, Billing and Collections, and as the Director of Financial Planning, Budgets and Rates. In addition, he has experience in the private sector, including roles as a project engineer for Amoco Oil Company and with a global environmental engineering consultant firm. Mr. Roche presently serves on the Board of Directors of Vystar Credit Union. Mr. Roche holds a bachelor degree in Mechanical Engineering from Georgia Institute of Technology, a bachelor of science degree in Accounting from the University of Florida, an MBA and a master's degree of Accountancy from the University of North Florida. Mr. Roche is a licensed Professional Engineer in the State of Florida and is a Certified Public Accountant.

*Melissa H. Dykes, Chief Financial Officer*. Ms. Dykes has served as Chief Financial Officer since March 2013. She provides leadership to ensure the long-term financial health of JEA, resulting in access to capital at low cost for JEA's customers. She is responsible for all aspects of JEA's finances, including treasury, financial reporting, financial planning and analysis, and budgeting, as well as corporate strategy, supply chain management and shared services. She has lead responsibility for ensuring compliance with all reporting, regulatory and tax requirements for JEA.

Ms. Dykes currently serves on the Finance and Audit Committee of TEA.

Prior to joining JEA, Ms. Dykes was CFO at a portfolio company of a large energy private equity firm and a principal in a renewable energy development company, where she was responsible for origination, commercial structuring, development, and capital raising for renewable energy projects. She also was Vice President of Investment Banking at JPMorgan. While at JPMorgan, Ms. Dykes was responsible for providing capital solutions for clients, including over \$26 billion in financings for many municipal electric and water systems across the country, risk management product delivery, and mergers and acquisitions. Prior to joining JPMorgan, Ms. Dykes worked for The World Bank Group where she researched and published on private participation in infrastructure industries in developing countries. Ms. Dykes is a graduate of the University of Florida and holds a certificate in Advanced Management from Dartmouth College.

*Ted E. Hobson, Chief Compliance Officer*. Mr. Hobson joined JEA in 1973 and has overall responsibility for development, implementation and maintenance of JEA's Compliance Programs including NERC Electrical Standards, NERC Critical Infrastructure Protection (CIP) standards, FACTA regulations and other related federal and state regulations. He is also responsible for JEA's physical security department as well as Audit Services and Enterprise Risk Management. Mr. Hobson served on the Board of Directors of TEA from the founding of TEA in 1997 until

restructuring in 2011 and is currently JEA's representative on the Settlement and Operating Committee. Mr. Hobson is JEA's alternate board member for the Florida Electric Reliability Coordinating Council (FRCC).

Mr. Hobson's previous position was Director of Energy Delivery, where he was responsible for all electric field activities including overhead and underground line work, system protection and controls, substation maintenance and the 24-hour operation of the JEA power system including generation commitment and dispatch, transmission operation and security and interchange services with other utilities. During his over 40 years with JEA, he has worked in the areas of distribution, engineering, trouble dispatching, system operations and system planning. Mr. Hobson has served as JEA's representative to the Florida Reliability Coordinating Council (FRCC) for over 15 years, is an alternate Board Member and was chair of the Operating Committee for the past six years. He also served on various North American Electric Reliability Corporation (NERC) committees and subcommittees and is a member and past chair of the NERC Compliance and Certification Committee.

Mr. Hobson holds a BSEE from the University of Florida, and is a registered Professional Engineer in the State of Florida.

## The position of Chief Customer Officer is currently vacant.

Angelia R. Hiers, Chief Human Resources Officer. Ms. Hiers is a career human resource professional, with industry knowledge and experience at strategic and tactical levels, in all aspects of human resources and organizational development. During her career, she has been responsible for employee and labor relations, compensation, benefits, recruiting, training and development, safety and wellness, diversity and inclusion. Throughout her career, Ms. Hiers has leveraged her collaborative, energetic and creative style to build successful human resource strategies and business solutions.

Prior to joining JEA, Ms. Hiers was the Vice President, Human Resources for Baker Distributing Company, a subsidiary of the publicly traded company, Watsco, Inc. She also served as Human Resources Director for CSX Technology and Senior Vice President/Managing Director, Right Management Consultants in Jacksonville, Florida. Prior to joining Right Management Consultants, Ms. Hiers held leadership positions in operations and human resources for Barnett Bank.

Ms. Hiers is a graduate of Edward Waters College with a Bachelor of Arts - Organizational Management and Jacksonville University with a Master of Business Administration.

**Paul J. Cosgrave, Chief Information Officer**. Mr. Cosgrave brings to JEA 40+ years of line management and IT consulting/systems integration experience. He retired in 2010 from the City of New York (NYC) as Commissioner for the Department of Information Technology and Telecommunications and as the Chief Information Officer (CIO) for NYC. At that time he became a Senior Fellow at the Center for Digital Government and resumed operating his own consulting firm, Startegies4Success. His areas of research and expertise are IT strategic planning, IT portfolio management, IT governance and IT consolidation/cost reduction at all levels of government.

Previously, Mr. Cosgrave served as the CIO at the Internal Revenue Service during a major turnaround period (1998-2001), and before that he spent 25 years in private industry, having worked as CEO for the Claremont Technology Group, a company he took public in 1996 and as a Managing Partner at Andersen Consulting (now Accenture) where he worked for 19 years. He has served as Executive Board member for the Information Technology Association of America (now TechAmerica) and has served on the Board of Directors for three separate public IT services

companies (Cognizant, Claremont Technology, and Technology Solutions). He has served on four not-for-profit Boards of Directors, including the Rensselaer Alumni Association where he recently completed his two-year term as president.

Mr. Cosgrave earned a BS and MS in Industrial Engineering from the Rensselaer Polytechnic Institute (RPI). He has been recognized by RPI with the Distinguished Albert Fox Demers Medal, the second highest recognition given to an alumnus, and by his fraternity, Sigma Chi, as a Significant Sig, an honor bestowed on a few alumni who have distinguished themselves in their careers. He has also been recognized by Computerworld, Information Week and Government Technology for his innovative leadership and accomplishments in the IT industry.

*Jody L. Brooks, Chief Legal Officer*. Jody Brooks joined JEA as Chief Legal Officer via an agreement with the City of Jacksonville Office of General Counsel in August 2016. Ms. Brooks had been rendering legal support and guidance to JEA while providing legal services to many other City departments. As the newly appointed JEA Chief Legal Officer, Ms. Brooks is fully dedicated to serving as the chief legal advisor to JEA and the JEA Board.

Ms. Brooks joined the Office of General Counsel in April 2013 and was subsequently promoted in 2015 to Chief, Government Operations Department. Prior to joining the Office of General Counsel, she held in house counsel positions with both The St. Joe Company and Allen Land Group handling real estate transactions, land use development and environmental matters. Earlier in her career, she worked as an associate at Lewis, Longman & Walker, P.A., where she represented property owners and government entities in federal, state and local government environmental, land use, zoning and condemnation matters.

She received a Bachelor of Science degree with honors from the Jacksonville University Davis College of Business and her Juris Doctor degree with honors and a Certificate in Environmental and Land Use Law from the University of Florida, Fredric G. Levin College of Law.

*Michael R. Hightower, Chief Public Affairs Officer*. Mr. Hightower joined JEA in 2015, bringing over 35 years of governmental and legislative relations experience. He also previously served 16 years on JEA's Board of Directors including two two-year terms as JEA Chair.

Mr. Hightower joined Blue Cross and Blue Shield of Florida (now Florida Blue) in 1981 as the Director of Governmental and Legislative Relations and in 1985 was named its Vice President of Governmental and Legislative Relations. He worked closely with key political leaders in the federal, state and local government and, after three decades of a successful career at Florida Blue, retired in late 2014. He then joined the international law firm of Holland & Knight LLP as a Senior Policy Advisor before joining the JEA senior leadership team.

In addition to his professional accomplishments, Mr. Hightower has dedicated his time, talents and leadership to numerous boards and commissions over the last 35 years. Presently he chairs the following: the Florida Governor's Mansion Foundation and the Florida Association of Professional Lobbyists. Mr. Hightower is also the Senior Vice President, Special Projects–Florida House and Florida's embassy in Washington, D.C. He also serves as an active board member of OneJax, Florida Ounce of Prevention and Five Star Veterans Center.

Prior to joining JEA, Mr. Hightower chaired the following organizations and civic and trade associations: United States Naval Academy; Jacksonville Chamber of Commerce; Florida House, Florida's Embassy in Washington, D.C.; Associated Industries of Florida; Florida Insurance Council; Florida News Service; Florida College System Foundation; Jacksonville Library Foundation;

Jacksonville Political Leadership Institute; JaxBix; Duval County Republican Party and the Cecil Field Base Closure Commission.

Throughout the state, he is well-known for his political leadership, having served as chair or finance chair for more than 580 successful local, state, and/or federal candidates since 1972. He has assisted in raising more than \$136.3 million for charitable, candidate and political party campaigns since 1981.

In 2006, Leadership Florida's leaders appointed Mr. Hightower to the Florida Energy Commission. The nine-member panel was charged with making recommendations to the Florida Legislature on ways to secure Florida's energy future.

In 2010, Florida's legislative leadership appointed Mr. Hightower to the Public Service Commission Nominating Council, charged with interviewing and recommending qualified candidates for gubernatorial appointment to the Florida Public Service Commission.

Mr. Hightower, a 1972 graduate of Jacksonville University, resides in Jacksonville. He was a third term 2003, 2005, 2007 University of Florida Graduate School adjunct instructor, "Principals of Lobbying".

# **Employees**

The employees of JEA are considered to be governmental (public) employees and, as such, have the right to organize, be represented and bargain collectively for wages, hours and terms and conditions of employment, as provided in Chapter 447, Part II, Florida Statutes. Florida state law prohibits strikes and concerted work slowdowns by governmental (public) employees. Pursuant to the Charter, JEA has full and independent authority to hire, transfer, promote, discipline, terminate and evaluate employees and, consistent with the provisions of the Charter relating to civil service, to establish employment policies relating to hiring, promotion, discipline, termination and other terms and conditions of employment, to enter into negotiations with employee organizations with respect to wages, hours and terms and conditions of employment and to take such other employment related action as needed to assure effective and efficient administration and operation of its utilities systems. The Council is the legislative body with authority to approve or not approve collective bargaining agreements and to resolve any statutory impasses that may arise from collective bargaining.

As of October 1, 2016, JEA had 2,158 budgeted employee positions (exclusive of the Power Park employees referred to below), of which 1,554 were budgeted to the Electric System, 599 were budgeted to the Water and Sewer System and five were budgeted to the District Energy System. Except for the Management Team and a minor number of contract employees, such employees have civil service status.

Approximately 1,704 employees are covered by five collective bargaining agreements. These employees are represented by the American Federation of State, County, and Municipal Employees ("AFSCME"), the International Brotherhood of Electrical Workers ("IBEW"), Local 2358 and the Northeast Florida Public Employees, Local 630, Laborers' International Union of North America ("LIUNA"), all of which are affiliated with the AFL-CIO, and by a professional employees' association (the "PEA," Professional Employees Association) and a supervisors' association (the "JSA," Jacksonville Supervisors Association) that have no AFL-CIO affiliation. JEA has collective bargaining agreements with all the collective bargaining agents, which expired September 30, 2016. Contract negotiations for successor agreements commenced in the second quarter of Fiscal Year 2016 and the parties are actively seeking resolution for three year successor agreements.

Substantially all of JEA's employees participate in the City's general employees pension plan ("GEPP"). Employees of the Power Park participate in a separate pension plan. See Note 12 to JEA's Financial Statements set forth in APPENDIX A to this Annual Disclosure Report for a discussion of certain information on the City's plan. The Actuarial Valuation and Review as of October 1, 2015 for the City's GEPP (the "October 1, 2015 Actuarial Valuation Report") is available for viewing and downloading from the City's website (<a href="www.coj.net">www.coj.net</a>) by selecting "Government," then selecting "All Departments" under "City Departments," then selecting "Retirement System" under "Finance and Administration," then selecting "Plan Valuation Statements" from the navigation tab on the left hand side and then selecting "General Employees Retirement Plan, Actuarial Valuation, Oct. 2015" under "Government Accounting Standards Board and Plan Valuation Statements."

As indicated in the October 1, 2015 Actuarial Valuation Report, the aggregate unfunded actuarial accrued liability for the GEPP decreased from \$947,344,126 for the Fiscal Year ended September 30, 2013 to \$900,236,692 for the Fiscal Year ended September 30, 2015. During such period, the funded ratio of the plan increased from 62.30 percent for the Fiscal Year ended September 30, 2013 to 65.81 percent for the Fiscal Year ended September 30, 2014 and increased to 66.80 percent for the Fiscal Year ended September 30, 2015. At the same time, JEA's aggregate contribution to the GEPP increased from \$27,038,000 for the Fiscal Year ended September 30, 2013 to \$34,149,000 for the Fiscal Year ended September 30, 2014 and to \$40,179,000 for the Fiscal Year ended September 30, 2015. JEA has been informed by the City that the actuary for the GEPP has calculated JEA's allocated share of the unfunded actuarial accrued liability for the GEPP reported in the October 1, 2015 Actuarial Valuation Report to be \$434,790,702 of the total unfunded actuarial accrued liability of \$900,236,692, reflecting decreases of \$4,755,571 and \$10,062,615, respectively, relative to the 2014 amounts provided to JEA by the City or contained in the October 1, 2014 actuarial valuation report. Please also see Section 3, Exhibit L, page 27 of the October 1, 2015 Actuarial Valuation Report in which it is shown that the contributors (which include JEA) to the GEPP contributed \$10,351,295 less than the actuarially determined employer contributions in dollar terms for Plan Year ended September 30, 2014 and \$4,318,361 less than the actuarially determined employer contributions for Plan Year ended September 30, 2015 because actual payroll growth has been less than projections leading to a lower level of payroll throughout those years. Such a shortfall in a given year is added to the total unfunded actuarial accrued liability and a new 30-year amortization base is calculated for that year which in effect adds the shortfall to future required contributions.

In accordance with Florida law, which requires capping the payroll growth rate assumption at the rate equal to the average payroll growth rate in the plan over the preceding 10 years, the actuary lowered the payroll growth rate from 2.24 percent to 1.14 percent for the 30-year period beginning with the October 1, 2015 valuation. Also, for the October 1, 2015 valuation, the GEPP used a modified mortality improvement scale and maintained an assumed rate of return of 7.50 percent per annum. These were significant factors in the increase in JEA's contribution rate as a percentage of payroll from 33.20 percent to the 36.79 percent rate shown in the October 1, 2015 actuarial valuation report for fiscal years beginning October 1, 2015 and October 1, 2016, respectively. JEA's required aggregate contribution in its Fiscal Year 2016 budget was \$48.5 million, as approved by the JEA Board on June 16, 2015. JEA's required aggregate contribution in its Fiscal Year 2017 budget is \$54.6 million, as approved by the JEA Board on June 21, 2016. The required aggregate contribution amounts calculated for the Fiscal Year 2016 budget and the Fiscal Year 2017 budget are based on a number of assumptions, including an assumption on the level of payroll for each of such Fiscal Years.

JEA's actual aggregate contributions to the GEPP were approximately \$43.2 million and \$40.2 million for the Fiscal Years ended September 30, 2016 and 2015, respectively. While the amount of JEA's aggregate contributions to the GEPP increased in 2016 from the amount contributed in 2015, such contributions do not constitute a significant portion of JEA's operating expenses either in the aggregate or separately when considering the portion of such contributions attributable to the Electric System as a percentage of the operating expenses of the Electric System. JEA also provides a medical benefits plan

that it makes available to its retirees. See Note 12, Note 14 and pages 92-97 of JEA's Financial Statements set forth in APPENDIX A to this Annual Disclosure Report for a discussion of the pension plans, "other post-employment benefit" plan and actuarial accrued liability.

The City from time to time has proposed various changes to the City's GEPP. Most of JEA's employees participate in the City's GEPP. At this time, JEA cannot predict the final outcome of any efforts to reform the City's GEPP. In March 2016, the governor signed into law a bill allowing local county governments to levy a pension liability surtax to fund an underfunded defined benefit retirement plan or system such as the GEPP under certain conditions, beginning with approval by a majority of the electors of the county voting in a referendum. In April, the Council authorized such a referendum, which voters in Duval County approved in August 2016. Among other conditions, a local government may only impose such a surtax if admission to defined benefits plans receiving surtax proceeds will be closed to future employees and the local government and collective bargaining units consent to requiring each member to make employee retirement contributions of at least 10 percent of salary once the plan or system is closed. The City and JEA have entered intocompleted negotiations with their collective bargaining units- resulting in proposed agreements which recognize the increased employee contribution rate and closure of the GEPP defined benefit plan to new hires effective October 1, 2017. As of the date of this Annual Disclosure Report, [two of JEA's collective bargaining units (AFSCME and JSA) have ratified JEA's proposed contracts, two JEA collective bargaining units (IBEW Local 2358 and LIUNA) have tentative agreements to be voted on by union membership on March 14, 2017, and negotiations with the remaining JEA collective bargaining unit, PEA, are ongoing.] As of the date of this Annual Disclosure Report, [the City's collective bargaining units that are impacted by the GEPP have reached tentative agreements. LEA cannot predict the timing of the conclusion or outcome of the negotiations the proposed agreements have been submitted for consideration and approval to the Council. This legislative process typically takes six to eight weeks for completion.

As of October 1, 2016, JEA had 230 budgeted employees for the Power Park who were engaged in performing the operational, maintenance and administrative tasks associated with operations of the Power Park. All non-managerial persons employed by JEA for the Power Park are governmental (public) employees, can organize under the provisions of Chapter 447, Part II, Florida Statutes, and, as such, are prohibited from participating in strikes or other work stoppages. Approximately 159 of the Power Park employees are represented by IBEW Local 1618. The current collective bargaining agreement covers the timeframe of October 1, 2015 through September 30, 2018. In a prior collective bargaining agreement and under statutory authority, certain terms and conditions of employment were imposed, including separating the existing JEA St. John's River Power Park System Employees' Retirement Plan ("SJRPP Plan") into two tiers of employees. Tier One participants remain in the traditional defined benefit plan, and Tier Two employees (defined as employees with fewer than 20 years' experience) participate in a modified defined benefit plan, or "cash balance" plan, with an employer match provided for any Tier Two employee who contributes to the 457 Plan. Also, effective on February 25, 2013, Tier One was closed to all new employees hired on or after February 25, 2013.

The SJRPP Plan is a single-employer contributory defined benefit plan covering employees of the Power Park. As of October 1, 2014, the SJRPP Plan's actuarial value of assets was \$145,425,186, the actuarial accrued liability entry-age normal was \$150,629,186, the unfunded actuarial accrued liability was \$5,204,000, the funded ratio was 96.5 percent, the covered payroll was \$17,253,952 and the unfunded actuarial accrued liability as a percentage of covered payroll was 30.2 percent. As of October 1, 2015, the SJRPP Plan's actuarial value of assets was \$138,901,756, the actuarial accrued liability entry-age normal was \$159,261,274, the unfunded actuarial accrued liability was \$20,359,518, the funded ratio was 87.2 percent, the covered payroll was \$16,664,648 and the unfunded actuarial accrued liability as a percentage of covered payroll was primarily attributable to the unfunded actuarial accrued liability as a percentage of covered payroll was primarily attributable to the unfavorable investment experience of the SJRPP Plan assets during the year ended September 30, 2015.

The SJRPP Plan's assumed rate of return was reduced from 7.25 percent to 7.0 percent for use in the Annual Actuarial Valuation performed as of October 1, 2012 and later. See Note 12, Note 14 and pages 92-97 of JEA's Financial Statements set forth in APPENDIX A to this Annual Disclosure Report for a discussion of the pension plans, "other post-employment benefit" plan and actuarial accrued liability. The objective of the SJRPP Plan is to establish and receive contributions that are intended to bring the plan's funding ratio to 100 percent by October 1, 2019, and meeting this objective is the main source of volatility in employer contributions.

# [Remainder of page intentionally left blank]

# **Certain Demographic Information**

Under Florida law, the City and Duval County are organized as a single, consolidated government. Based upon the 2010 United States Census, the consolidated City is the most populous city in the State of Florida. The City covers 840 square miles and is one of the largest cities in area in the United States.

The Jacksonville Metropolitan Statistical Area ("MSA") is composed of Duval, Clay, Nassau, St. Johns and Baker Counties, an area covering 3,202 square miles. The U.S. Census Bureau estimates that the Jacksonville MSA had a population of [1,449,481]1,478,212 as of July 1, [2015]-2016. The Jacksonville MSA is currently the fourth most populous MSA in the State of Florida. The table below shows population for the Jacksonville MSA.

#### **Population**

	Jacksonville
<u>Year</u>	<u>MSA</u>
1980	722,252
1990	906,727
2000(1)	1,122,750
2010	1,345,596
<del>2015</del> 2016	<del>[1,449,48</del>
	<del>1]</del> 1,478,2
	<u>12</u>

Source: United States Census Bureau

The economy of the Jacksonville MSA contains significant elements of trade and services, transportation services, manufacturing, insurance and banking and tourism. The Port of Jacksonville is one of the largest ports on the South Atlantic seaboard and in terms of tonnage ranks third in the State of Florida. A number of insurance and banking companies maintain regional offices in the City. The tourism and recreational facilities in the City include an arena, a performing arts center, a convention center, EverBank Field (which is the home field of the National Football League's Jacksonville Jaguars), a baseball park, numerous golf courses and resorts and various recreational facilities at the beaches. Two large United States Navy bases are located in the City.

The table below sets forth the annual, not seasonally adjusted, labor force, employment and unemployment figures for the Jacksonville MSA and comparative unemployment figures for the State of Florida and the United States for the most recent 10 years ended December 2016.

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<sup>(1)</sup> Baker County was included in the Jacksonville MSA starting with the 2000 United States census.

	Jackson	<b>Unemployment Rate (%)</b>			
<u>Year</u>	<u>Civilian</u>	<b>Employment</b>	Unemployment Rate (%)	<u>Florida</u>	<u>U.S.</u>
2007	674,548	648,003	3.9	4.0	4.6
2008	687,704	646,302	6.0	6.3	5.8
2009	681,026	612,993	10.0	10.4	9.3
2010	697,120	622,208	10.7	11.1	9.6
2011	701,601	633,473	9.7	10.0	8.9
2012	704,583	646,531	8.2	8.5	8.1
2013	709,800	659,875	7.0	<del>7.3</del> <u>7.2</u>	7.4
2014	717,730 <u>7</u> 16,249 724,8827	672,906671, 696 686,860680,	6.2	6.3	6.2
2015	19,195 740,6647	930 706,585699	<u>5.2</u> <u>5.3</u>	5.4	5.3
2016 <sup>(1)</sup>	34,243	531	4 <u>.64.7</u>	4.8	4.9

Source: Florida Research and Economic Information Database Application, <a href="http://freida.labormarketinfo.com/default.asp.">http://freida.labormarketinfo.com/default.asp.</a>
<a href="http://freida.labormarketinfo.com/default.asp.">http://freida.labormarketinfo.com/default.asp.</a>

The table below shows the estimated average non-agricultural wage and salary employment by sector for the Jacksonville MSA for the calendar year 2016(+)-2016.

	Number of <u>Employees</u>	Percent of <u>Distribution</u>
Trade, Transportation and Utilities	<del>139,500</del> <u>137,800</u>	<del>20.8</del> <u>20.6</u>
Other Services <sup>(2)</sup>	<del>118,600</del>	<del>17.6</del>
Professional and Business Services	<del>103,900</del>	<del>15.5</del>
Education and Health Services	<del>101,600</del> <u>102,700</u>	<del>1</del> 5.1 <u>15.4</u>
<u>Professional and Business Services</u>	<u>101,500</u>	<u>15.2</u>
Leisure and Hospitality	<u>82,900</u>	<u>12.4</u>
Government	<del>76,100</del> <u>75,300</u>	11.3
Finance	<del>64,300</del> <u>64,000</u>	9.6
Construction	<del>37,900</del> <u>38,600</u>	<del>5.6</del> <u>5.8</u>
Other Services <sup>(1)</sup>	<u>35,200</u>	<u>5.3</u>
Manufacturing	<u>30,400</u> 29,400	<u>4.5</u> 4.4
Total Non-Agricultural Employment	<del>672,300</del> 667,400	<u>100.0</u>
(Except Domestics, Self-Employed		
And Unpaid Family Workers)		

Source: United States Department of Labor.

The following table lists the 10 largest non-governmental employers in the Jacksonville MSA and the approximate size of their respective work forces.

Name of Employer	<b>Product or Service</b>	Approximate No. of Employees
Baptist Health System	Healthcare	9,800
Bank of America / Merrill Lynch	Banking	8,000
Florida Blue	Health Insurance	6,000
Southeastern Grocers	Supermarkets	5,700
Mayo Clinic	Healthcare	5,500
JP Morgan Chase	Banking	3,900
Citibank	Banking	3,700
CSX Transportation	Railroad	3,600
UF Health Jacksonville	Healthcare	3,600

<sup>(1)</sup> Preliminary. (2) Consists of other services, information, leisure and hospitality, and natural resources and mining.

Source: Jacksonville Regional Chamber of Commerce Research Department biennial employer survey, fall 2012, as partially amended through December 2016.

## [Remainder of page intentionally left blank]

The following table lists the eight largest governmental employers in the Jacksonville MSA and the approximate size of their respective work forces.

Name of Employer	Type of Entity/Activity	Approximate No. of Employees
Naval Air Station, Jacksonville	United States Navy	19,800
Duval County Public Schools	Public Education	$11,876^{(1)}$
Naval Air Station, Mayport	United States Navy	9,000
City of Jacksonville	Municipal Government	$7,195^{(2)}$
Clay County School Board	Public Education	4,663
St. Johns County School District	Public Education	4,388 <sup>(3)</sup>
Fleet Readiness Center	Maintenance / Repair Overhaul	3,850
United States Postal Service	United States Government	3,800

Source: Jacksonville Regional Chamber of Commerce Research Department employer survey, fall 2012, as partially amended through December 2016.

- (1) Duval County Public Schools website, full-time staff (http://www.duvalschools.org/domain/5268)
- (2) City of Jacksonville Annual Budget 2016-17 (http://www.coj.net/departments/finance/docs/budget/fy-16-17-annual-budget.aspx).
- (3) St. Johns County School District website (<a href="http://www.stjohns.k12.fl.us/about/">http://www.stjohns.k12.fl.us/about/</a>).

#### Indebtedness of JEA

The indebtedness of JEA relating to its Electric Utility Functions as of the date of this Annual Disclosure Report consists of Electric System Bonds, Subordinated Electric System Bonds, Power Park Issue Two Bonds, Power Park Issue Three Bonds, Bulk Power Supply System Bonds and borrowings outstanding under the Revolving Credit Facility (as defined herein) for the account of the Electric System. See "ELECTRIC UTILITY SYSTEM - FINANCIAL INFORMATION RELATING TO ELECTRIC UTILITY FUNCTIONS - Debt Relating to Electric Utility Functions" herein. For information regarding the Revolving Credit Facility, see "OTHER FINANCIAL INFORMATION - Revolving Credit Facilities" herein. As described under "INTRODUCTION - General" herein, the debt of JEA relating to its Electric Utility Functions, the debt of JEA relating to the Water and Sewer System and the debt of JEA relating to the District Energy System are payable from and secured by separate revenue sources. Accordingly, the information contained in this Annual Disclosure Report relating to JEA's Electric Utility Functions is not relevant to the Water and Sewer System Bonds (as described in the Water and Sewer/DES ADR), the Subordinated Water and Sewer System Bonds (as described in the Water and Sewer/DES ADR) or the District Energy System Bonds (as described in the Water and Sewer/DES ADR) and should not be taken into account in evaluating such debt.

The description of the debt of JEA contained herein and of the documents authorizing, securing and relating to such debt do not purport to be comprehensive or definitive. All references herein to such documents are qualified in their entirety by reference to such documents.

For a detailed description of the outstanding debt of JEA as of September 30, 2016, see Note 8 to the financial statements of JEA set forth in APPENDIX A attached hereto.

# Forward-Looking Statements and Associated Risks

This Annual Disclosure Report contains forward-looking statements, including statements regarding, among other items, (a) anticipated trends in JEA's business and (b) JEA's future capital requirements and capital resources. These forward-looking statements are based on, among other things, JEA's expectations and are subject to a number of risks and uncertainties, certain of which are beyond JEA's control. Actual results could differ materially from those anticipated by these forward-looking statements. In light of these risks and uncertainties, there can be no assurance that events anticipated by the forward-looking statements contained in this Annual Disclosure Report will in fact transpire.

JEA's independent certified public accountants have not examined, compiled or otherwise applied procedures to the forward-looking statements or financial forecasts presented herein and, accordingly, do not express an opinion or any other form of assurance on such forward-looking statements or financial forecasts.

#### ELECTRIC UTILITY SYSTEM

#### **ELECTRIC UTILITY FUNCTIONS**

#### General

In 2015, the latest year for which such information is available, JEA was the eighth largest municipally owned electric utility in the United States in terms of number of customers. During the Fiscal Year Ended September 30, 2016, the Electric System served an average of 451,788 customer accounts in a service area which covers virtually the entire City. JEA also sells electricity to retail customers and an electric system in neighboring counties. In addition, as described under "ELECTRIC UTILITY SYSTEM - ELECTRIC UTILITY FUNCTIONS - St. Johns River Power Park - Ownership" herein, JEA has sold to FPL a portion of the capacity (and associated energy) of JEA's interest in the Power Park pursuant to the long-term power sales provisions of the Power Park Joint Ownership Agreement (hereinafter defined) (such sale being referred to herein as the "FPL-Power Park Sale").

JEA's total energy sales in the Fiscal Year ended September 30, 2016, net of off-system sales and the energy sold by JEA to FPL pursuant to the FPL-Power Park Sale, were approximately 12.6 billion kilowatt-hours ("kWh"). Total revenues, including investment income, for the Electric System for the Fiscal Year ended September 30, 2016, net of the revenues received by JEA from the FPL-Power Park Sale (calculated for purposes of the Electric System Schedule of Debt Service Coverage (see "ELECTRIC UTILITY SYSTEM - FINANCIAL INFORMATION RELATING TO ELECTRIC UTILITY FUNCTIONS - Schedules of Debt Service Coverage" herein)), were approximately \$1,243,966,000.

The electric utility facilities of JEA are divided for financing purposes into the Electric System, the Power Park and the Scherer 4 Project.

The Electric System includes generation, transmission, interconnection and distribution facilities. The generating facilities, located on four plant sites in the City, currently consist of a dual residual fuel oil/gas-fired steam turbine-generator unit, four diesel-fired combustion turbine ("CT") generator units, seven dual-fueled (gas/diesel) CT generator units, one steam turbine generator unit with the steam provided by a heat recovery steam generator served from two of the seven CTs (a 2-on-1 combined cycle unit), and two petroleum coke ("petcoke")- and coal-fired circulating fluidized bed ("CFB") steam turbine-generator units. As of the date of this Annual Disclosure Report, the total combined installed capacity of the Electric System's generating units is 2,573 megawatts ("MW"), net, summer and 2,896 MW, net, winter (see "ELECTRIC UTILITY SYSTEM - *ELECTRIC UTILITY FUNCTIONS* - Electric System - *Electric System Generating Facilities*" herein).

Pursuant to Chapter 80-513, Laws of Florida, Special Acts of 1980 (as amended and supplemented, the "Bulk Power Act"), JEA is authorized to acquire, own and operate as a separate bulk power supply utility or system, electric generating plants and transmission lines within the City and within and outside of the State of Florida. The Power Park and the Scherer 4 Project each have been developed as a separate bulk power supply system under the Bulk Power Act and, as such, are not included in the Electric System.

The Power Park is a coal- and petcoke-fired steam electric generating station currently rated at 1,276 MW, net, located in the northeast section of the City. The Power Park is jointly owned by JEA and FPL; JEA's ownership interest in the Power Park is 80 percent. The Electric System is entitled to 50 percent (equal to 638 MW, net) of the capacity of the Power Park and is required to pay for such capacity on a "take-or-pay" basis (that is, whether or not the Power Park is operable or operating and notwithstanding the suspension, interruption, interference, reduction or curtailment of the output of the Power Park for any reason) by making deposits into certain funds and accounts established pursuant to the First Power Park Resolution and the Second Power Park Resolution. Pursuant to the FPL-Power Park Sale, JEA will sell to FPL 37.5 percent of the net generating capacity of JEA's interest in the Power Park until the Power Park Joint Ownership Agreement expires in 2022, subject to the limitation that FPL may not receive in excess of 25 percent of the product of (a) the nameplate capacity of JEA's 80 percent ownership interest in the Power Park and (b) the number of years from the date FPL first took energy pursuant to such sale until the latest maturity date of the Power Park Issue Two Bonds defined and referred to herein. While JEA can make no prediction as to the manner in which FPL will schedule its right to receive the capacity and related energy sold pursuant to the FPL-Power Park Sale, if FPL continues to schedule in the same manner as it has through September 30, 2016, FPL's right to receive capacity and energy would be suspended earlier than the contract expiration. After expiration of the Power Park Joint Ownership Agreement, JEA will receive 80 percent of the Power Park's capacity and related energy output.

JEA has entered into an agreement in principle with FPL for an early termination of the Power Park Joint Ownership Agreement and cessation of commercial operations in January 2018 with decommissioning of the plant to occur thereafter. See "ELECTRIC UTILITY SYSTEM – ELECTRIC UTILITY FUNCTIONS – St. John's River Power Park – Early Termination of Power Park Joint Ownership Agreement" for additional information.

In addition, JEA owns a 23.64 percent interest in Unit 4 of the Robert W. Scherer Electric Generating Plant ("Scherer Unit 4"), a coal-fired steam electric generating unit currently rated at 846 MW, net, located near Forsyth, Georgia and a proportionate ownership interest in associated common facilities and an associated coal stockpile (such ownership interests are referred to herein as the "Scherer 4 Project"). The Scherer 4 Project entitles JEA to 200 MW, net, of the capacity of Scherer Unit 4. The Electric System is entitled to the capacity of the Scherer 4 Project and is required to pay for such capacity on a "take-or-pay" basis by making deposits into certain funds and accounts established pursuant to the Restated and Amended Bulk Power Supply System Resolution.

JEA is permitted under the resolution of JEA adopted on March 30, 1982, authorizing JEA's Electric System Revenue Bonds (as heretofore amended, restated and supplemented, the "Electric System Resolution") to construct or acquire and own and/or operate other electric generating utilities or systems for the purpose of furnishing and supplying electric energy and to issue debt obligations to finance the cost of separate electric generating utilities as separate systems. The Power Park and the Scherer 4 Project constitute the only two such separate systems undertaken by JEA as of the date of this Annual Disclosure Report.

Pursuant to the Electric System Resolution, JEA's obligation to make payments from the Electric System with respect to the Power Park is a Contract Debt payable as a Cost of Operation and

Maintenance of the Electric System. Additionally, all costs of operating and maintaining the Scherer 4 Project are Contract Debts of the Electric System, payable as part of the Electric System's Cost of Operation and Maintenance. See "ELECTRIC UTILITY SYSTEM - FINANCIAL INFORMATION RELATING TO ELECTRIC UTILITY FUNCTIONS - Debt Relating to Electric Utility Functions - Electric System Contract Debts" herein.

JEA currently has no ownership interest in any nuclear power plant; however, it does have a purchase power agreement with Municipal Electric Authority of Georgia ("MEAG Power") for electric energy to be produced from two under construction nuclear generating units (see "ELECTRIC UTILITY SYSTEM - *ELECTRIC UTILITY FUNCTIONS* - Electric System - *Power Purchase Contracts*" herein). JEA also has an option to purchase an ownership interest in a to-be-constructed nuclear power plant (see "ELECTRIC UTILITY SYSTEM - *ELECTRIC UTILITY FUNCTIONS* - Resource Requirements - *Option to Purchase Interest in Lee Nuclear Station*" herein).

## **Electric System**

# Power and Energy Resources

Electric power and energy sold by JEA to its customers is provided from the following sources: JEA's interest in the Power Park (see "ELECTRIC UTILITY SYSTEM - ELECTRIC UTILITY FUNCTIONS - St. Johns River Power Park" herein); JEA's interest in Scherer Unit 4 (see "ELECTRIC UTILITY SYSTEM - ELECTRIC UTILITY FUNCTIONS - Scherer 4" herein); the generating facilities owned by JEA as part of the Electric System (see subsection "Electric System Generating Facilities" below in this section); and various power purchase arrangements (see subsection "Power Purchase Contracts" below in this section). JEA's interests in the Power Park and Scherer Unit 4, the generating facilities of the Electric System and JEA's various firm purchase power arrangements are committed and dispatched on an economic basis as necessary to serve JEA's load. In addition, economy energy is purchased for JEA, by the joint power marketing alliance described below, from time to time when such energy is available at a lower cost than energy produced from JEA's generating facilities. See subsection "Participation in The Energy Authority" below in this section.

# Electric System Generating Facilities

*General.* The generating facilities of the Electric System are located at four plant sites - the J. Dillon Kennedy Generating Station ("Kennedy"), the Northside Generating Station ("Northside"), the Brandy Branch Generating Station ("Brandy Branch") and the Greenland Energy Center ("GEC"). See "ELECTRIC UTILITY SYSTEM - *ELECTRIC UTILITY FUNCTIONS* - Resource Requirements - *Capacity*" herein.

JEA's (Northside Unit 3, a steam unit, presently burns residual fuel oil and natural gas, while four CTs at Northside burn diesel. The Kennedy CTs 7 and 8, Brandy Branch CTs 1, 2 and 3 and GEC CTs 1 and 2 burn natural gas as the primary fuel. The Kennedy and Brandy Branch units are dual-fueled with diesel as backup and the GEC CT units are also capable of having diesel as backup. Brandy Branch STM 4 is a steam turbine generator that is part of a combined cycle unit that uses waste heat from Brandy Branch CTs 2 and 3. In addition, natural gas is used at times to supplement the solid fuel in Northside Units 1 and 2. Northside Units 1 and 2 burn petcoke and coal. Northside Unit 3 was originally scheduled to be placed into reserve storage on April 1, 2016, approximately three years ahead of the unit's scheduled retirement. Due to low gas prices and increasing solid fuel prices, placing the unit into reserve storage has been delayed at least until the end of Fiscal Year 2017 the expected early retirement of Power Park, Northside Unit 3 is expected to continue in operation at least through the current planning period which ends on December 31, 2026.

# [Remainder of page intentionally left blank]

The pertinent statistics concerning the generating facilities of the Electric System as of the date of this Annual Disclosure Report are as follows:

		Et (DI )			Installed Net Capacity (MW)		
<b>Station</b>	<u>Unit</u>	<u>Type</u> (1)	First Placed in Service	<u>Fuel</u> <sup>(2)</sup>	<u>Summer</u>	Winter	
Kennedy	7(3)	CT	6/00	G/LO	150	191	
	8(3)	CT	6/09	G/LO	<u> 150</u>	<u> 191</u>	
					_300	<u>382</u>	
Northside	1	ST	5/03 <sup>(4)</sup>	Petcoke/Coal	293	293	
	2	ST	4/03(4)	Petcoke/Coal	293	293	
	3	ST	7/77	<u>G/</u> HO <del>/G</del>	524	524	
	3	CT	2/75	LO	53	62	
	4	CT	1/75	LO	53	62	
	5	CT	12/74	LO	53	62	
	6	CT	12/74	LO	53	<u>62</u>	
					<u>1,322</u>	<u>1,356</u>	
Brandy Branch	1(3)	CT	5/01	G/LO	150	191	
	$2^{(3)}$	CT	5/01	G/LO	150	186	
	3(3)	CT	10/01	G/LO	150	186	
	STM 4	ST	1/05	WH	<u>201</u>	_223	
					<u>651</u>	<u> 786</u>	
GEC	1	CT	6/11	G/LO	150	186	
	2	CT	6/11	G/LO	<u> 150</u>	<u> 186</u>	
					_300	<u>372</u>	
System Total					<u>2,573</u>	<u>2,896</u>	

<sup>(1)</sup> CT - Combustion Turbine

*Planned Additional Capacity.* JEA has no current plans to expand capacity at any of its four generating plants.

#### Fuel Mix

JEA has undertaken a fuel diversification strategy that improves its competitive position in the electric services industry. JEA has the ability to use natural gas as a fuel source for generation in Greenland Energy Center (GEC) CT1 and CT2. Kennedy CT7, Kennedy CT8; and Brandy Branch Units 1, 2 and 3 are dual-fueled CT units, burning natural gas as the primary fuel with diesel as backup. The waste heat from Brandy Branch Units 2 and 3 is utilized in Brandy Branch STM 4. This combined cycle configuration provides additional energy without additional fuel consumption. Northside Unit 3 uses

ST - Steam Turbine

IC - Internal Combustion Engine

<sup>(2)</sup> G - Natural Gas

LO - Light Oil (diesel)

HO - Heavy Oil (residual fuel oil)

WH - Waste Heat

B) Net capacity for the summer is based on natural gas and for the winter is based on diesel.

<sup>(4)</sup> Northside Unit 1 was originally placed in service in November 1966, and Northside Unit 2 was originally placed in service in March 1972. Both units have been re-powered with CFB boilers, and their turbine generators and other ancillary equipment have been refurbished. The dates indicated in the table are the respective dates on which each was released for normal dispatch operation. Northside Units 1 and 2 each have gross capacities of 310 MW.

natural gas as a fuel source for generation with residual fuel oil as backup. JEA's 1970's vintage CTs provide less than one percent of JEA's total energy requirements and are powered by diesel.

JEA uses CFB technology in Northside Units 1 and 2. This technology allows JEA to use a blend of bituminous coal, petroleum coke and natural gas in these units. In addition, firm, solid fuel-based capacity and energy has been provided by the Power Park and Scherer Unit 4. Power Park currently burns bituminous coal and is permitted to burn up to 30 percent petcoke. Scherer Unit 4 burns sub-bituminous coal from the powder river basin, providing further fuel diversification. JEA adjusts its use of solid fuel-based generation depending on its cost relative to competing resources, such as natural gas.

The following table sets forth JEA's fuel mix for the Fiscal Years ended September 30, 2012 through 2016 and JEA's projected fuel mix for the Fiscal Years ending September 30, 2017 through 2021. The information in the following table does not take into account the energy sold to FPL pursuant to the FPL Power Park Sale (see "ELECTRIC UTILITY SYSTEM - ELECTRIC UTILITY FUNCTIONS - St. Johns River Power Park - Ownership" herein).

## PERCENT FUEL MIX<sup>(1)</sup>

Fiscal Year Ending September 30,	<u>Oil</u>	<u>Gas</u>	Power Park <sup>(2)</sup> (Coal)	Northside (Coal/ Petcoke) <sup>(3)</sup>	Scherer Unit 4 (Coal)	MEAG Vogtle 3 & 4 Nuclear_ <u>Purchase</u>	Economy Purchases From Other Sources	Total MWh Sales <sup>(4)</sup>
Actual								
2012		0.1 45.5	23.3	8.5	9.7	0.0	12.9	12,047,926
2013		0.0 34.2	28.1	16.2	12.1	0.0	9.4	11,971,899
2014		0.1 32.2	28.2	24.5	9.6	0.0	5.3	12,308,331
2015		0307.8	22.7	21.3	10.3	0.0	7.9	12,517,575
2016		0316.4	16.2	26.8	8.1	0.0	12.2	12,872,762
Projected(5)								
2017	0.0	4 <u>2.3</u> 4 1.7	<del>26.9</del> <u>24.1</u>	<del>11.8</del> <u>11.5</u>	<del>11.8</del> <u>12.0</u>	0.0	<del>7.2</del> <u>10.6</u>	12,426,202 <u>12</u> ,109,342
2018	<u>0.00.1</u>	34.24 0.4	<del>25.6</del> <u>6.0</u>	<del>26.2</del> 27.6	<del>6.9</del> <u>8.9</u>	0.0	<del>7.0</del> 16.9	12,597,909 <u>12</u> .597,899
2019	<u>0.00.1</u>	30.3 <u>4</u> 0.8	<del>28.9</del> <u>0.0</u>	<del>24.4</del> <u>27.1</u>	<del>7.2</del> <u>10.1</u>	<u>2.2</u> 0.0	<del>7.0</del> 21.9	12,709,324 <u>12</u> .609,303
2020	0.0	25.4 <u>4</u> 6.5	<del>32.6</del> <u>0.0</u>	<del>22.7</del> <u>28.1</u>	<u>5.48.8</u>	<u>8.66.0</u>	<del>5.2</del> 10.5	12,772,350 <u>12</u> ,497,133
2021	<del>0.0</del> <u>0.1</u>	21.7 <u>4</u> 3.4	<del>32.3</del> <u>0.0</u>	<del>23.4</del> <u>28.0</u>	<u>5.8</u> <u>8.4</u>	<del>12.5</del> <u>13.0</u>	4.4 <u>7.5</u>	12,715,002 <u>12</u> .645,975

<sup>(1)</sup> Percentages may not add to 100 percent due to rounding.

<sup>(2)</sup> The Power Park currently is permitted to burn up to 30 percent petcoke and up to 100 percent coal. See "ELECTRIC UTILITY SYSTEM - ELECTRIC UTILITY FUNCTIONS - St. Johns River Power Park - Fuel Supply and Transportation" herein for a discussion about the non-use of petcoke.

<sup>(3)</sup> The projected fuel mix for Northside Units 1 and 2 is 60 percent petcoke, 40 percent coal and 0 percent natural gas.

<sup>(4)</sup> Actual megawatt-hour ("MWh") sales include non-firm off-system sales, which totaled 74,852 MWh in the Fiscal Year ended September 30, 2012, 42,286 MWh in the Fiscal Year ended September 30, 2013, 136,342 MWh in the Fiscal Year ended September 30, 2014, 83,367 MWh in the Fiscal Year ended September 30, 2015 and 169,037 MWh in the Fiscal Year ended September 30, 2016. Projections include aggregate non-firm off-system sales of 855,283516,554 MWh during the Fiscal Years ending September 30, 2017 through 2021.

The projected figures contained herein are forward-looking statements and are subject to change without notice. These figures are based on current conditions and assumptions, including JEA's growth assumptions, environmental regulations, fuel prices, fuel availability and other factors in effect as of the date hereof and are subject to significant regulatory, business, economic and environmental uncertainties and contingencies. Events may occur and circumstances may change subsequent to the date hereof that would have a material impact on the projections presented herein. The achievement of certain results contained in such forward-looking statements involves known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those stated in the forward-looking statements. JEA does not commit to issue any updates or revisions to those forward-looking statements if or when its expectations change, or events, conditions or circumstances on which such statements are based occur or fail to occur.

#### Fuel Contracts

JEA has solid fuel storage at Northside for a maximum of approximately 25 days of operating inventory. JEA purchases spot volumes to supply the fuel needs of Northside Units 1 and 2, which operate on a blend of petroleum coke (petcoke), coal, and natural gas. For Northside Units 1 and 2 during the Fiscal Year ended September 30, 2016, JEA purchased approximately 91 percent of its petcoke requirements from KOMSA Sarl (Koch Minerals SA), approximately 6 percent from TCP Petcoke Corporation and approximately 3 percent from IMI Fuels LLC. Approximately 49 percent of its coal requirements were purchased from Coal Marketing Company (USA) INC., approximately 25 percent from Interocean Coal Sales LLC, approximately 20 percent from Glencore, and approximately 6 percent from Électricité de France (EDF). JEA has contractual commitments to purchase all of the solid fuel for the Power Park through October of 2017. Approximately 90 percent of the expected coal requirement for JEA's ownership share of Scherer Unit 4 has commitments to purchase in 2017. Contract terms for solid fuel specify minimum purchase commitments at certain prices subject to adjustments for price level changes according to the contract. In addition, JEA has remarketing rights for the majority of its solid fuel supply.

JEA maintains diesel inventory at Brandy Branch, Kennedy, and Northside. Additional diesel supply is purchased from time to time in the open market as needed.

JEA has a 20-year agreement for natural gas with Shell Energy North America L.P. ("Shell Energy") that ends in 2021. In Fiscal Year 2016 Shell Energy acquired BG Energy Merchants, LLC ("BGEM") and assumed the agreement that had been in place between BGEM and JEA. The agreement with Shell Energy supplied 53 percent of JEA's natural gas needs for Fiscal Year 2016 at prices that were, at the time the agreement was entered into, and are, as of the date of publication of this Annual Disclosure Report, below delivered competing gas supply options (including both commodity and transportation components). The balance of JEA's gas requirements are purchased on the spot market. Under the Shell Energy agreement, contract terms for the natural gas specify minimum annual purchase commitments. JEA has the option to remarket any excess natural gas purchases. JEA also has long-term contracts with Florida Gas Transmission Company ("FGT") for firm gas transportation capacity to allow delivery of additional gas volumes. To support additional future gas requirements, JEA has contracted with TECO Peoples Gas System ("Peoples") for a release of firm gas transportation capacity through Southern Natural Gas Company's system and FGT's system that began in June 2010. In addition, JEA has contracted with Southern Natural Gas Company for firm natural gas transportation.

TEA has managed a portion of JEA's natural gas supply since 2001. See "Participation in The Energy Authority" below.

JEA and Peoples jointly own pipelines that serve Northside and Brandy Branch, and JEA owns a pipeline that delivers natural gas to the Power Park for use during unit starts and for flame stabilization. Peoples owns the pipeline that serves Kennedy and JEA's Buckman Street wastewater treatment plant. Peoples may interrupt delivery of gas to JEA under certain emergency circumstances.

JEA owns the GEC lateral pipeline (the "Greenland Lateral") which is used to deliver gas to GEC. In 2008, JEA signed an agreement with SeaCoast Gas Transmission, LLC for firm intrastate gas transportation service to the Greenland Lateral.

JEA has developed and implemented a program intended to hedge its exposure to changes in fuel prices. Pursuant to this program, futures and options contracts may be entered into from time to time to help manage market price fluctuations. Realized gains and losses resulting from this program are reflected in JEA's fuel expense. See subsection "Fuel Mix" above in this section. For a discussion of

JEA's fuel management program, see Note 10 and Note 11 to the financial statements of JEA set forth in APPENDIX A attached hereto.

For a discussion of fuel contracts relating to the Power Park, see "ELECTRIC UTILITY SYSTEM - *ELECTRIC UTILITY FUNCTIONS* - St. Johns River Power Park - *Fuel Supply and Transportation*" herein. For a discussion of JEA's fuel procurement arrangement for the Scherer 4 Project, see "ELECTRIC UTILITY SYSTEM - *ELECTRIC UTILITY FUNCTIONS* - Scherer 4 - *Fuel Supply*" herein.

#### Natural Gas Sales

In March 2015, JEA made the decision to market natural gas to commercial and industrial customers within its service area as allowed under Article 21 of the Charter and JEA's Fuel Management Services Procurement Directive. JEA will supply natural gas under the Natural Choice Program established by Peoples, which gives commercial and industrial customers the option to choose their gas supplier. JEA anticipates a number of benefits from its participation in the Natural Choice program. Natural gas sales are expected to generate marginal net revenues, which will be reported as "other revenues" under the Electric Enterprise Fund. In addition, participation in the program will help recover a portion of the cost of underutilized natural gas transportation. JEA will become a complete energy provider within its service territory for businesses that select JEA to be their natural gas supplier. Through Fiscal Year 2016, this program has signed 69 accounts, including The Hyatt, Jacksonville Zoo, Community Hospice, Jacksonville Housing Authority, First Baptist Church of Jacksonville, and Dresser Equipment, a division of GE.

#### **Power Purchase Contracts**

JEA's Board established targets to acquire 10 percent of JEA's energy requirements from nuclear sources by 2018 and up to 30 percent by 2030. With that goal, JEA entered into a power purchase agreement (as amended, the "Additional Vogtle Units PPA") with MEAG Power for an estimated 206 MW of capacity and related energy from MEAG Power's interest in two additional nuclear generating units (the "Additional Vogtle Units") being constructed at the Alvin W. Vogtle Nuclear Plant in Burke County, Georgia. The 206 MW will represent over 10 percent of JEA's estimated total energy requirements in the year 2020. JEA also acquired an option to purchase an ownership interest in the William States Lee nuclear power plant (see "ELECTRIC UTILITY SYSTEM - ELECTRIC UTILITY FUNCTIONS - Resource Requirements - Option to Purchase Interest in Lee Nuclear Station" herein).

JEA's participation in the Additional Vogtle Units PPA will provide fuel diversity to JEA's sources of energy with a fuel source (nuclear energy) that has no carbon dioxide ("CO<sub>2</sub>") emissions. JEA concluded that the engineering, procurement and construction contract (the "EPC Agreement" or the "EPC Contract") for the Additional Vogtle Units was with a reputable contractor (a consortium consisting of Westinghouse Electric Company LLC ("Westinghouse") and Stone & Webster, Inc. (later CB&I, now owned by Westinghouse), hereinafter referred to as the "Consortium" or the "Contractor") and that the contract terms were reasonable. Additionally, JEA will not be subject to any decommissioning obligation after the term of the Additional Vogtle Units PPA. JEA regards the owners of the Additional Vogtle Units (including Georgia Power Company ("GPC"), Oglethorpe Power Corporation ("Oglethorpe"), MEAG Power and the City of Dalton, Georgia (collectively, the "Owners," or "Original Vogtle Co-Owners" or "Vogtle Co-Owners")) to be strong financially and considers Southern Nuclear Operating Company (the operator of the Additional Vogtle Units), an affiliate of GPC ("Southern Nuclear"), to have strong nuclear operations experience.

MEAG Power created the three separate "projects" described below (the "Vogtle Units 3&4 Project Entities") for the purpose of owning and financing its 22.7 percent undivided ownership interest

in the Additional Vogtle Units (representing approximately 500.308 MW of capacity and related energy based upon the nominal rating of the Units). Additionally, MEAG's ownership was transferred to the Vogtle Units 3&4 Project Entities (Projects J, M and P). MEAG Power has PPAs with each of the Vogtle Units 3&4 Project Entities which correspond ("back-to-back") with MEAG's PPAs with its off-takers. The project corresponding to the portion of MEAG Power's ownership interest which will provide the capacity and energy to be purchased by JEA under the Additional Vogtle Units PPA is referred to herein as "Project J."

The Additional Vogtle Units PPA requires JEA to pay MEAG Power for the capacity and energy at the full cost of production (including debt service on the bonds issued and to be issued by MEAG Power to finance the facilities that will provide the portion of the capacity and related energy to be sold to JEA of MEAG Power's output share of its ownership interest in the Additional Vogtle Units) plus a margin beginning at \$0.50/MWh and increasing to \$3.50/MWh over the term of the Additional Vogtle Units PPA. Under the Additional Vogtle Units PPA, JEA is entitled to approximately 9.35 percent of capacity and related energy from each of the Additional Vogtle Units for a 20-year term commencing on each Additional Vogtle Unit's commercial operation date and is required to pay for its output share of the Additional Vogtle Units on a "take-or-pay" basis (that is, whether or not either Additional Vogtle Unit is completed or is operating or operable, and whether or not its output is suspended, reduced or the like or either Additional Vogtle Unit is terminated in whole or in part), except that JEA is not obligated to pay the "margin" referred to above during such periods in which the output of the applicable Additional Vogtle Unit is suspended or terminated.

In February 2014, the Original Vogtle Co-Owners amended the Vogtle Units 3&4 Ownership Agreement and the Vogtle Operating Agreement in certain respects, in order, among other things, to permit MEAG Power to assign to the Vogtle Units 3&4 Project Entities, and to permit the Vogtle Units 3&4 Project Entities to assume, MEAG Power's rights and obligations thereunder with respect to Vogtle Units 3&4. Effective as of the date of such transfers, such amendments became effective and the Vogtle Units 3&4 Project Entities have assumed, in proportion to their respective undivided ownership interests in Vogtle Units 3&4, MEAG Power's rights and obligations under the Vogtle Units 3&4 Ownership Agreement and the Vogtle Operating Agreement with respect to Vogtle Units 3&4.

Under the Additional Vogtle Units PPA, MEAG Power is required to allocate the principal of its bonds to be issued to finance Project J to each of the Additional Vogtle Units and, except as described below with respect to (a) bonds issued after the commercial operation date of a particular Additional Vogtle Unit to finance capital improvements to that unit (referred to herein as "post-COD capital improvement bonds") and (b) refunding bonds, to structure the principal so allocated based upon level monthly debt service over an assumed 40-year period commencing not earlier than 12 months nor later than 36 months following the estimated commercial operation date of the Additional Vogtle Unit to which such principal relates, with the first 20 installments of such principal coming due in the same amounts and on the same dates as are determined as a result of such assumed 40-year amortization. Except in the case of post-COD capital improvement bonds and refunding bonds, JEA is obligated under the Additional Vogtle Units PPA to pay (i) the interest component of debt service of each such series of Project J bonds attributable to a particular Additional Vogtle Unit only for a period of 240 months from and including the month in which such obligation commences and (ii) the principal component of debt service of each such series of Project J bonds attributable to a particular Additional Vogtle Unit only for a period of 240 months from and including the month in which such obligation commences. Since MEAG Power has advised JEA that MEAG Power intends to capitalize all interest accruing on such bonds through the respective estimated commercial operation dates of each Additional Vogtle Unit, it is expected that JEA's payment obligations with respect to debt service on such bonds will commence on such respective estimated commercial operation dates, except for accruals of principal payments with respect to the initial series of Project J bonds which commenced effective April 1, 2016.

In the case of post-COD capital improvement Project J bonds, under the Additional Vogtle Units PPA, MEAG Power is required (a) to structure the principal of any series of such bonds allocated to each capital improvement item (or group of capital improvement items having comparable estimated useful lives) based upon level monthly debt service over an assumed period commencing on the second April 1 following the estimated in-service date of the capital improvements (or group of capital improvements) and ending on the earlier of (i) the expiration of the term of the applicable unit's combined construction and operating license, or (ii) the end of the estimated economic useful life of the capital improvement item (or group of capital improvement items), as estimated at the time of the pricing of such bonds, with each installment of principal due on or before April 1 of the calendar year following the last day on which JEA is entitled to its share of the output of the particular Additional Vogtle Unit coming due in the same amount and on the same date as is determined as a result of such assumed amortization and (b) to capitalize interest on such bonds to such estimated in-service date. In the case of post-COD capital improvement Project J bonds, JEA is obligated under the Additional Vogtle Units PPA to pay (i) the interest component of debt service of each such series of bonds attributable to a particular Additional Vogtle Unit only during the period that commences on the day following the date to which all interest is capitalized on the bonds of such series and ends on the last day on which JEA is entitled to its share of the output of such unit and (ii) the principal component of debt service of each such series of bonds attributable to a particular Additional Vogtle Unit only during the period that commences on the date that is one year prior to the first due date of such principal and ends on the last day on which JEA is entitled to its share of the output of such unit.

In the case of refunding bonds, under the Additional Vogtle Units PPA, MEAG Power is required to structure the debt service on each such series of bonds in a manner consistent with the principles governing the issuance of bonds under the Additional Vogtle Units PPA, so as to equitably apportion the savings or dissavings, as applicable, resulting from the issuance of such refunding bonds both during the term of the Additional Vogtle Units PPA and during the period following the term of the Additional Vogtle Units PPA during which certain of MEAG Power's participants are entitled to the capacity and energy of Project J and are obligated to pay debt service on such refunding bonds under power sales contracts with MEAG Power relating to Project J. In the case of refunding bonds, JEA is obligated under the Additional Vogtle Units PPA to pay the interest and principal components of debt service of each such series of bonds attributable to a particular Additional Vogtle Unit only for the same number of months as JEA would have been obligated to pay each such component on the refunded bonds had such refunded bonds not been so refunded.

MEAG Power issued \$1,248,435,000 of its Plant Vogtle Units 3&4 Project J Bonds (the "2010 PPA Bonds") on March 11, 2010. This issuance of the 2010 PPA Bonds results in a portion of fixed annual costs to JEA for one of the Additional Vogtle Units of approximately \$36.3 million per year for 20 years beginning on the commercial operation date of Unit 3 and a portion of fixed annual costs to JEA for the other Additional Vogtle Unit of approximately \$28.7 million per year for 20 years beginning on the commercial operation date of Unit 4, assuming that each Unit achieves commercial operation on the original guaranteed substantial completion dates. Interest on the financing is expected to be capitalized through each unit's commercial operation date. In addition, JEA is responsible for paying principal accruals which come due prior to commercial operation, resulting in estimated principal payments under the Additional Vogtle Units PPA prior to receipt of capacity and energy from Project J, of \$3.6 million in Fiscal Year 2016, \$9.2 million in Fiscal Year 2017, \$11.7 million in Fiscal Year 2018, \$9.9 million in Fiscal Year 2019 and \$3.7 million in Fiscal Year 2020.

On June 24, 2015, in order to obtain a loan guarantee from the United States Department of Energy ("DOE") for further funding of the Plant Vogtle Units 3&4, MEAG Power divided its undivided ownership interest in Plant Vogtle Units 3&4 into three separate undivided interests. MEAG Power transferred approximately 41.175 percent of its ownership interest, representing 206 MW of nominally rated generating capacity (which is the portion of MEAG Power's ownership interest attributable to

Project J), to MEAG Power SPVJ, LLC, a limited liability company organized and existing under the laws of the State of Georgia (the "Project J Entity"), of which MEAG Power is the sole member.

The Project J Entity then entered into a loan guarantee agreement with DOE under which the Project J Entity is permitted to borrow from the Federal Financing Bank an aggregate amount of \$577,743,446, of which \$24,482,348 is available to pay capitalized interest on certain borrowings under the loan guarantee agreement. The Project J Entity received proceeds from borrowings under the loan guarantee agreement in an aggregate principal amount of \$327,442,591 on June 24, 2015. The Project J Entity is permitted to obtain additional borrowings under the loan guarantee agreement (exclusive of amounts set aside for the payment of capitalized interest on borrowings) in an aggregate principal amount of \$225,818,507.

Other co-owners (GPC and Oglethorpe), completed their loan agreements with the DOE early in 2014.

MEAG Power issued additional Project J bonds in the amount of approximately \$185 million in the third quarter of 2015.

MEAG Power, based upon information provided to it by its agent, has advised JEA that the Owners, including MEAG Power, and the Consortium have established both informal and formal dispute resolution procedures in accordance with the EPC Agreement to be followed in attempts to resolve issues arising during the course of constructing a project of this magnitude. The Consortium and the Owners have successfully initiated both formal and informal claims through these procedures to resolve disputes, including ongoing claims. When matters are not resolved through these procedures, the parties may proceed to litigation.

On December 31, 2015, Westinghouse acquired Stone & Webster, Inc. from CB&I (the "Acquisition"). In connection with the Acquisition, Stone & Webster, Inc. changed its name to WECTEC Global Project Services Inc. ("WECTEC"). Certain obligations of Westinghouse and Stone & Webster, Inc. have been guaranteed by Toshiba Corporation, Westinghouse's parent company, and CB&I's The Shaw Group Inc., respectively. On March 9, 2016, in connection with Westinghouse's acquisition of WECTEC and pursuant to the settlement agreement described below, the guarantee of The Shaw Group Inc. was terminated. The guarantee of Toshiba Corporation remains in place. In the event of certain credit rating downgrades of any Vogtle Co-Owner, such Vogtle Co-Owner will be required to provide a letter of credit or other credit enhancement. Additionally, as a result of credit rating downgrades of Toshiba Corporation, Westinghouse provided the Vogtle Co-Owners with letters of credit in an aggregate amount of \$920 million in accordance with, and subject to adjustment under, the terms of the EPC Contract.

Under the terms of the EPC Contract, the Vogtle Co-Owners agreed to pay a purchase price that is subject to certain price escalations and adjustments, including fixed escalation amounts and certain index-based adjustments, as well as adjustments for change orders, and performance bonuses. The EPC Contract also provides for liquidated damages upon the Contractor's failure to fulfill the schedule and performance guarantees, subject to a cap of 10 percent of the contract price, or approximately \$920 to \$930 million. In addition, the EPC Contract provides for limited cost sharing by the Vogtle Co-Owners for increases to Contractor costs under certain conditions. The maximum amount of additional capital costs under this provision attributable to the Vogtle Units 3&4 Project Entities (based on their respective ownership interests) is approximately \$56.8 million. Each Vogtle Co-Owner is severally (and not jointly) liable for its proportionate share, based on its ownership interest, of all amounts owed to the Contractor under the EPC Contract. The Vogtle Units 3&4 Project Entities' aggregate proportionate share is 22.7 percent. In the event of certain credit rating downgrades of any Vogtle Co-Owner, such Vogtle Co-Owner will be required to provide a letter of credit or other credit enhancement.

The Vogtle Co-Owners may terminate the EPC Contract at any time for their convenience; provided that the Vogtle Co-Owners will be required to pay certain termination costs. <u>Under the terms of the EPC Contract, the Contractor does not have the right to terminate the EPC Contract for convenience.</u> The Contractor may terminate the EPC Contract under certain circumstances, including certain Vogtle Co-Owner suspension or delays of work, action by a governmental authority to permanently stop work, certain breaches of the EPC Contract by the Vogtle Co-Owners, Vogtle Co-Owner insolvency, and certain other events. <u>In the event of an abandonment of work by the Contractor, the maximum liability of the Contractor under the EPC Contract is increased significantly but remains subject to limitations.</u> <u>According to the declaration of Lisa J. Donahue submitted on March 29, 2017 with the initial bankruptcy filings of Westinghouse and its affiliates (discussed below), the maximum total liability of the Contractor under the EPC Contract is capped at 20% of the contract price of the Vogtle reactors and 40% of the contract price for abandonment of the work.</u>

On December 31, 2015, Westinghouse and the Vogtle Co-Owners entered into a definitive settlement agreement (the "Contractor Settlement Agreement") to resolve disputes between the Vogtle Co-Owners and the Contractor under the EPC Contract, including the case that was pending in the U.S. District Court for the Southern District of Georgia (the "Vogtle Construction Litigation"). Effective December 31, 2015, GPC, acting for itself and as agent for the other Vogtle Co-Owners, and the Contractor entered into an amendment to the EPC Contract to implement the Contractor Settlement Agreement. The Contractor Settlement Agreement and the related amendment to the EPC Contract (i) restrict the Contractor's ability to seek further increases in the contract price by clarifying and limiting the circumstances that constitute nuclear regulatory changes in law; (ii) provide for enhanced dispute resolution procedures; (iii) revise the guaranteed substantial completion dates to match the current estimated in-service dates of June 30, 2019 for Vogtle Unit No. 3 and June 30, 2020 for Vogtle Unit No. 4; (iv) provide that delay liquidated damages will now commence from the current estimated nuclear fuel loading date for each unit, which is December 31, 2018 for Vogtle Unit No. 3 and December 31, 2019 for Vogtle Unit No. 4, rather than the original guaranteed substantial completion dates under the EPC Contract; and (v) provide that the Vogtle Units 3&4 Project Entities, based on their aggregate 22.7 percent ownership interest, will pay to the Contractor approximately \$174.0 million, of which \$60.2 million has been paid previously under the dispute resolution procedures of the EPC Contract. Further, subsequent to December 31, 2015, the Vogtle Units 3&4 Project Entities paid \$63.6 million under the terms of the Contractor Settlement Agreement. In addition, the Contractor Settlement Agreement provides for the resolution of other open existing items relating to the scope of the project under the EPC Contract, including cyber security, for which costs were reflected in the Vogtle Units 3&4 Project Entities' previously disclosed in-service cost estimate. Further, as part of the settlement and in connection with the Acquisition: (i) Westinghouse engaged Fluor Enterprises, Inc., a subsidiary of Fluor Corporation, as a new construction subcontractor; and (ii) the Vogtle Co-Owners, CB&I, and The Shaw Group Inc. entered into mutual releases of any and all claims arising out of events or circumstances in connection with the construction of Vogtle Units 3&4 that occurred on or before the date of the Contractor Settlement Agreement. On January 5, 2016, the Vogtle Construction Litigation was dismissed with prejudice. The Project J share of the settlement cost is approximately \$71 million.

MEAG Power expects that based on the current scheduled in-service dates of June 30, 2019 for Vogtle Unit No. 3 and June 30, 2020 for Vogtle Unit No. 4 and giving effect to the payment of the Vogtle Units 3&4 Project Entities' shares of settlement payment and the agreed-upon payment for the other open existing items relating to the scope of the project under the EPC Contract, including cyber security, described above, the Vogtle Units 3&4 Project J estimated in-service cost will be approximately \$1,847 million, including construction costs, financing costs through the estimated in-service dates, contingencies, initial fuel load costs, and switchyard and transmission costs. Additional financing needs related to reserve funds and other fund deposits required under MEAG Power's and the Vogtle Units 3&4 Project J financing documents result in total financing needs of \$2,002 million for the Vogtle Units 3&4 Project J, of which the following financing has been obtained: (i) \$1,248 million in the initial

long-term financing in 2010, (ii) \$333 million from initial advances under DOE Guaranteed Loans and (iii) \$185 million in Project J Bonds issued in September 2015.

MEAG Power believes that, based on the current scheduled in-service dates of June 30, 2019 for Plant Vogtle Unit No. 3 and June 30, 2020 for Plant Vogtle Unit No. 4 and giving effect to the payment of the Vogtle Units 3&4 Project Entities' shares of the settlement payment and the agreed-upon payment for the other open existing items relating to the scope of the project under the EPC Contract, including cyber security, described above, sufficient funds are available (consisting of amounts on deposit in various construction funds and accounts and projected earnings thereon and amounts remaining to be advanced under the DOE Guaranteed Loans, subject to the satisfaction of the conditions precedent to the making of such additional Advances) to pay 100 percent of the projected costs of acquisition and construction and financing costs of the Vogtle Units 3&4 Projects (including the funding of reserves) and to provide a contingency in the amount of at least \$160.0 million, which contingency will be available to cover the Vogtle Units 3&4 Project Entities' shares of up to approximately \$700.0 million of additional Vogtle Units 3&4 construction costs over current estimates (exclusive of financing costs).

On January 21, 2016, GPC submitted the Contractor Settlement Agreement and the related amendment to the EPC Contract to the Georgia Public Service Commission (the "GPSC") for its review. In accordance with the GPSC's subsequent order, on April 5, 2016, GPC filed supplemental information in support of the Contractor Settlement Agreement and GPC's position that all construction costs to date have been prudently incurred and that the current estimated in-service capital cost and schedule are reasonable.

The GPSC has approved 15 Vogtle Construction Monitoring ("VCM") reports covering the periods through June 30, 2016, including construction capital costs incurred. On February 28, 2017, GPC filed its 16th VCM report with the GPSC covering the period from July 1 through December 31, 2016.

On October 20, 2016, GPC and the GPSC Staff entered into a settlement agreement (the "Vogtle Cost Settlement Agreement") resolving the following prudence matters: (i) none of the costs incurred through December 31, 2015 and reflected in the 14th VCM report will be disallowed from GPC's rate base on the basis of imprudence; (ii) the Contractor Settlement Agreement is reasonable and prudent and none of the amounts paid or to be paid pursuant to the Contractor Settlement Agreement should be disallowed from GPC's rate base on the basis of imprudence; (iii) financing costs on verified and approved capital costs will be deemed prudent provided they are incurred prior to December 31, 2019 and December 31, 2020 for Plant Vogtle Units 3 and 4, respectively; and (iv) (a) the in-service capital cost forecast for GPC will be adjusted to \$5.680 billion (Revised Forecast), which includes a contingency of \$240 million above GPC's current forecast of \$5.440 billion, (b) capital costs incurred up to the Revised Forecast will be presumed to be reasonable and prudent with the burden of proof on any party challenging such costs, and (c) GPC would have the burden to show that any capital costs above the Revised Forecast are reasonable and prudent. The Vogtle Cost Settlement Agreement was approved by the GPSC on December 20, 2016.

GPC reports that there are processes in place that are designed to assure compliance with the requirements specified in the Westinghouse AP1000 Design Control Document and the construction operating licenses, including inspections by Southern Nuclear and the United States Nuclear Regulatory Commission (the "NRC") that occur throughout construction. As a result of such compliance processes, certain license amendment requests have been filed and approved or are pending before the NRC. Various design and other licensing-based compliance issues may arise as construction proceeds, which may result in additional license amendments or require other resolution. If any license amendment requests or other licensing-based compliance issues are not resolved in a timely manner, there may be

delays in the project schedule that could result in increased costs either to the Vogtle Co-Owners or the Contractor or to both.

As construction continues, the risk remains that challenges with Contractor performance including fabrication, assembly, delivery, and installation of the shield building and structural modules, delays in the receipt of the remaining permits necessary for the operation of Vogtle Units 3&4, or other issues could arise and may further impact the Vogtle Units 3&4 project schedule and cost. The Contractor's performance and progress in recent months, primarily associated with Unit 3, has resulted in additional current schedule pressure and may result in schedule delays with respect to Unit 3, and to a lesser extent, with respect to Unit 4. It is anticipated that the Contractor will provide further information as to potential delay in connection with these Units within the next three months.

Future claims by the Contractor or the Vogtle Co-Owners could arise throughout construction. These claims may be resolved through formal and informal dispute resolution procedures under the EPC Contract and, under the enhanced dispute resolution procedures, may be resolved through litigation after the completion of nuclear fuel load for both units.

The ultimate outcome of these matters and any potential impact on JEA cannot be determined at this time.

On December 27, 2016, Toshiba Corporation ("Toshiba") issued a press release providing an update related to its goodwill booking following the acquisition of CB&I Stone & Webster (S&W), Inc.'s nuclear construction and integrated services business by Westinghouse. In its press release, Toshiba stated that as of the December 2015 closing date of the foregoing transaction, the estimate of the goodwill resulting from the transaction was approximately \$87 million, which was a preliminary determination and subject to change. Toshiba in its press release announced that there was a possibility the goodwill will reach a level of several billion US dollars, which would result in a negative impact on Toshiba financial results, as a result of impairment of all or part of the goodwill.

# [TO BE FURTHER UPDATED AFTER EXPECTED ANNOUNCEMENT BY TOSHIBA ON APRIL 11, 2017]

Toshiba also reported that Westinghouse, in accordance with US generally accepted accounting principles, has been engaged in purchase accounting and studying the actual status based on materials provided by S&W and others after the transaction completion. According to Toshiba's December 27, 2016 announcement, Westinghouse was evaluating the cost to complete the AP1000 contracts (including Vogtle Unit No. 3 and Vogtle Unit No. 4) in order to measure the fair value of acquired assets and liabilities. Toshiba's December 27, 2016 announcement further stated that (a) Westinghouse has found that the cost to complete the US projects will far surpass the original estimates, mainly due to increases in key project parameters, resulting in far lower asset value than originally determined, leading to a possible recognition of goodwill far exceeding the original December 2015 estimate of \$87 million; (b) the required goodwill impairment testing is under study and has not yet been determined, although current estimation shows a level of several billion US dollars; and (c) impairment testing for the goodwill will be initiated by both Westinghouse and Toshiba toward the third quarter FY2016 (ended December 31, 2016) business results, and is expected to be provided on or about February 14, 2017. As a result, Toshiba's announcement stated that there is possibility of an impairment of all or part of the goodwill for both Westinghouse and Toshiba, depending on the results. On January 19, 2017, local Japanese media including the Mainichi, Yomiuri and Nikkei newspapers said Toshiba was facing a write-down of 700 billion Yen (US\$6.1 billion). In response, Toshiba reiterated its earlier statements about the size of the goodwill impairment and timing of further disclosure.

On February 14, 2017, Toshiba provided notice of the following:

- (i) Toshiba obtained an extension of the deadline from February 14, 2017 to March 14, 2017 for it to submit its quarterly securities report for the period covering October 1, 2016 to December 31, 2016.
- (ii) Toshiba requested the extension because internal reports were made to Toshiba's Audit Committee (the "Audit Committee") that suggested that internal controls relating to the Purchase Price Allocation ("PPA") process for Westinghouse's acquisition of S&W were inadequate. In addition, managers at Westinghouse indicated concerns that senior management at Westinghouse was exerting inappropriate pressure in order to advance the PPA process. The Audit Committee concluded that if there were a possibility of an invalidation of internal controls, it might affect quarterly financial reporting, even though no particular item requiring revision has been found in the quarterly securities report. The Audit Committee and Westinghouse each hired separate law firms to investigate the existence of any inappropriate pressure by certain senior manager(s) and any impact on the financial statements if there were any such inappropriate pressure and to conduct various other investigations.
- (iii) Toshiba announced in its provisional forecast (unaudited) that its goodwill impairment loss for the third quarter ended December 31, 2016 is 712.5 billion Yen (US\$ 6.3 billion).
- (iv) Toshiba's Representative Executive Officer and Chairman will resign from his position as Representative Executive Officer as of February 15, 2017 to take management responsibility for the loss on goodwill and impairment cost to be recorded in relation to Westinghouse's acquisition of S&W from the Chicago Bridge & Iron Company N.V.

On March 14, 2017, Toshiba provided notice of the following: Toshiba obtained an extension of the deadline from March 14, 2017 to April 11, 2017 for it to submit its quarterly securities report for the period covering October 1, 2016 to December 31, 2016.

(i) Toshiba obtained an extension of the deadline from March 14, 2017 to April 11, 2017 for it to submit its quarterly securities report for the period covering October 1, 2016 to December 31, 2016.

Future claims by the Contractor or the Vogtle Co-Owners could arise throughout construction. These claims may be resolved through formal and informal dispute resolution procedures under the EPC Contract and, under the enhanced dispute resolution procedures, may be resolved through litigation after the completion of nuclear fuel load for both units.

On March 29, 2017, Westinghouse and WECTEC each filed for bankruptcy protection under Chapter 11 of the United States Bankruptcy Code. GPC, for itself and as agent for the other Vogtle Co-Owners, has entered into an interim assessment agreement with the Contractor and WECTEC Staffing Services LLC, dated as of March 29, 2017 (the "Interim Assessment Agreement"), to provide for a continuation of work with respect to Vogtle Units 3&4. South Carolina Electric & Gas Company entered into a similar interim assessment agreement with the Contractor relating to V.C. Summer (the "V.C. Summer Interim Assessment Agreement"). The provisions in the Interim Assessment Agreement remain subject to the approval of the bankruptcy court and will not be effective until the date of approval by the bankruptcy court (the "Effective Date"). The term of the Interim Assessment Agreement will extend from the Effective Date through the earlier of (i) April 28, 2017, (ii) the termination of the V.C. Summer Interim Assessment Agreement, or (iii) termination of the Interim Assessment Agreement by any party upon five business days' notice (the "Interim Assessment Period").

The Interim Assessment Agreement provides, among other items, that (1) GPC will be obligated to pay, on behalf of the Vogtle Co-Owners, all costs accrued by the Contractor for subcontractors and vendors for services performed or goods provided during the Interim Assessment Period, with these amounts to be paid to the Contractor, except for amounts accrued for Fluor Corporation ("Fluor"), which will be paid directly to Fluor, (2) during the Interim Assessment Period, the Contractor shall provide certain engineering, procurement and management services for Vogtle Units 3&4, to the same extent as contemplated by the EPC Contract, and GPC, on behalf of the co-owners, will make payments of \$5.4 million per week for these services, (3) GPC will have the right to make payments, on behalf of the Vogtle Co-Owners, directly to subcontractors and vendors who have accounts past due with the Contractor, (4) during the Interim Assessment Period, the Contractor will use its commercially reasonable efforts to provide information reasonably requested by GPC as is necessary to continue construction and investigate the completion status of Vogtle Units 3&4, (5) the Contractor will decide whether to reject or accept the EPC Contract by the later of (i) the termination of the Interim Assessment Agreement and (ii) April 28, 2017, and (6) during the Interim Assessment Period, GPC, on behalf of the Vogtle Co-Owners, will forbear from exercising any remedies against Toshiba under the guarantee of Toshiba, Under the Interim Assessment Agreement, all parties expressly reserve all rights and remedies under the EPC Contract, all related security and collateral, and under applicable law.

While GPC, on behalf of the Vogtle Co-Owners, is working to provide for a transition that will allow work to continue on Vogtle Units 3&4, GPC, along with the other Vogtle Co-Owners, also is undertaking a full-scale schedule and cost-to-complete assessment to determine the impact the Contractor's bankruptcy filing will have on the construction of Vogtle Units 3&4. MEAG Power intends to work with GPC and the other Vogtle Co-Owners to determine future actions related to Vogtle Units 3&4. GPC has stated that it also will be working with the Georgia Public Service Commission in regards to this same determination. In addition, GPC has stated that it intends, on behalf of the Vogtle Co-Owners, to take all actions available to it to enforce its rights related to the EPC Contract, including enforcing the guarantee of Toshiba, subject to the Interim Assessment Agreement, and accessing \$920 million of letters of credit provided by Westinghouse to the Vogtle Co-Owners.

The ultimate outcome of these matters and any The Contractor's bankruptcy filing is expected to have a material impact on the construction of Vogtle Units 3&4. Any potential impact on JEA cannot be determined at this time.

MEAG Power has stated that it will continue to monitor and evaluate developments related to Vogtle Units 3&4 and will endeavor to undertake a course of action that MEAG Power believes will advance the long-term interest of MEAG Power, JEA, PowerSouth Energy Cooperative and the participants relating to the Vogtle Units 3&4 Project Entities. GPC has stated that it will continue to take every action available to it to hold Westinghouse and Toshiba accountable for their financial responsibilities under the EPC Contract and Toshiba under its guarantee as described herein.

#### The ultimate outcome of the matters discussed above cannot be determined at this time.

JEA entered into a 20-year agreement (the "Wind Generation Agreement") with Nebraska Public Power District ("NPPD") in 2004 to participate in a wind generation project located in Ainsworth, Nebraska. JEA's participation in NPPD's wind generation project allowed JEA to receive environmental credits ("Green Tags") associated with this Green Power alternative. Under the Wind Generation Agreement, JEA agreed to purchase over a 20-year period 10 MW of capacity from NPPD's wind generation facility for an estimated net cost of \$2,280,958. In turn, NPPD buys back the energy at specified on/off peak charges. JEA makes all environmental attributes from this facility available to sell in order to lower rates for our customers. JEA has sold environmental credits for specified periods from this project thereby reducing but not eliminating JEA's net cost for this resource for that period.

With the expansion of JEA's renewable portfolio within the State of Florida, additional landfill gas generation and new solar facilities, JEA exercised its right to terminate this contract. JEA and NPPD have agreed to terminate the agreement effective December 2019.

JEA signed a Power Purchase Agreement with Trail Ridge Energy, LLC ("TRE") in 2006 to purchase energy and environmental attributes from a 9.6 MW landfill gas-to-energy facility at the City's Trail Ridge Landfill (the "Phase One Purchase"). The facility is one of the largest landfill gas-to-energy facilities in the Southeast. It achieved commercial operation in December 2008 for the Phase One Purchase. JEA and TRE executed an amendment to the Power Purchase Agreement in 2011 to purchase up to an additional 9.6 MW through TRE. Six MW of this additional 9.6 MW is being supplied to JEA from a landfill gas-to-energy facility in Sarasota, Florida. Cost to JEA will be the same as negotiated for Trail Ridge. JEA makes all environmental attributes from this facility available to sell in order to lower rates for our customers.

JEA signed a power purchase contract with Jacksonville Solar LLC in 2009 for the purchase for 30 years of all of the electricity and renewable energy credits generated by a 12.6 MW solar power facility which became fully operational on September 28, 2010. JEA makes all environmental attributes from this facility available to sell in order to lower rates for our customers.

In December 2014, a Solar Policy was approved by the JEA Board, setting forth the goal of an additional 38 MW of solar photovoltaic ("PV") power (via power purchase contracts) by the end of 2016. JEA's total goal for solar PV is now approximately 50 MW. JEA continues to evaluate additional solar PV projects as the price for large PV solar projects drops. In 2015, JEA awarded a total of 31.5 MW of solar PV power purchase contracts with terms of 20 to 25 years to various vendors. Power purchase agreements ("PPAs") have been finalized for a total of 26 MW, as follows: 7 MW with Northwest Jacksonville Solar Partners, LLC (groSolar); 4 MW with Hecate Energy, LLC; 5 MW and 2 MW with Inman Solar Incorporated; 3 MW with Old Plank Road Solar Farm LLC (Cox Communications/VeloSolar) and Imeson Solar Farm, LLC (National Solar) for 5 MW. JEA is still in contract negotiation with Mirasol Fafco Solar, Inc. for 1 MW solar PV. Another PPA for 5 MW on land owned by the U.S. Navy was awarded to Hecate Energy, LLC in 2016; however the lease agreement with the U.S. Navy is still in negotiation. A 4.5 MW award to SunEdison Utility Solutions, LLC was cancelled due to failure of the contractor to secure site control.

JEA's payment obligations with respect to the power purchase contracts described above constitute Contract Debts payable as a Cost of Operation and Maintenance of the Electric System. See "ELECTRIC UTILITY SYSTEM - *FINANCIAL INFORMATION RELATING TO ELECTRIC UTILITY FUNCTIONS* - Debt Relating to Electric Utility Functions - *Electric System Contract Debts*" herein.

# Participation in The Energy Authority

In May 1997, JEA, MEAG Power and South Carolina Public Service Authority (Santee Cooper) entered into a joint power marketing alliance through the formation of a nonprofit corporation in which such three parties constituted all of the members. The corporation is TEA, a Georgia nonprofit corporation. Subsequently, five additional publicly-owned utilities, NPPD, the City of Gainesville, Florida, doing business as Gainesville Regional Utilities ("GRU"), City Utilities of the City of Springfield, Missouri, Public Utility District No.1 of Cowlitz County, Washington and American Municipal Power, Inc. became members of TEA. The main office of TEA is in the City. TEA's board of directors consists of 10 directors. The board, all of whom are elected by the members, is composed of one director from each member and two non-voting directors who serve as the respective chairs of two standing committees.

TEA commenced operations in August 1997 and is engaged in buying and selling wholesale power and promoting the efficient use of the generation assets of its members to maximize the efficient use of electrical energy resources, reduce operating costs and increase operating revenues of the members. TEA is expected to accomplish the foregoing without impacting the safety and reliability of the electric system of each member. TEA transacts energy transactions among the members and external markets including arranging for any transmission services required to accommodate such transactions. TEA is the exclusive purchaser of short-term surplus energy from its members. Each member is responsible for having adequate firm generating capacity to serve its native load requirement plus operating reserve requirements. TEA has not engaged in the construction or ownership of generation or transmission assets. Additionally, the members have not engaged in other activities that are found in some power pools such as reserve sharing or dedication of all resources to serve the combined load.

TEA has managed a portion of JEA's natural gas supply since 2001. See "Fuel Contracts" above.

Pursuant to an Electric Advance Agreement and a Natural Gas Advance Agreement among TEA and its members and a Member Advance Agreement between JEA and TEA, JEA supports TEA's trading activities by the issuance of JEA guaranties and/or provision of cash advances as determined by TEA within the limits contained in such advance agreements. As of January 1, 2017, JEA is obligated to guaranty, directly or indirectly, certain of TEA's electric trading activities in an amount up to \$28,929,000 and certain of TEA's natural gas procurement and trading activities up to \$15,100,000, in either case, plus reasonable attorney's fees that any party claiming and prevailing under the guaranty might incur and be entitled to recover under its contract with TEA. The JEA Board has approved guaranties of up to \$34,286,000 for TEA's electric trading activities, up to \$60,000,000 (plus attorney's fees) for TEA's natural gas procurement and trading activities and up to \$50,000,000 for TEA's electric and natural gas activities solely for JEA's benefit (since 2014 none of this latter type of trading activity is being engaged in by TEA). The JEA Board can from time to time increase or (subject to certain limits) decrease the amount of its advances to TEA. For a discussion of JEA's investment in TEA and its commitments to TEA as of September 30, 2016, see Note 7 to the financial statements of JEA set forth in APPENDIX A attached hereto.

Order No. 889 of the Federal Energy Regulatory Commission ("FERC") established certain standards of conduct for utilities that offer open access transmission services. The effect of these standards would have been to require JEA to establish a wholesale marketing organization separate and apart from its operating group that controls operations of its generation and transmission facilities. JEA believes that the establishment of TEA satisfied that requirement at a cost to JEA that is substantially less than the cost that JEA would have incurred if it acted alone in establishing a wholesale marketing organization.

## Mutual Aid Alliance

JEA has entered into an agreement with six other electric utilities located in Florida and Georgia (the "Participating Utilities") to provide mutual aid in the form of energy and price commitments in the event of an extended outage of certain designated baseload generating units of the Participating Utilities. Under this agreement, each Participating Utility agrees to make available, from its own capacity and only to the extent it has capacity available in excess of its native load and firm sales commitments, energy to replace energy unavailable due to unplanned outages of the designated units in excess of 60 days ("Replacement Power"). Each Participating Utility is obligated to provide such Replacement Power for up to 365 days from the outage event. The Participating Utilities will provide such Replacement Power at a cost derived through a formula based upon natural gas prices. This agreement has a term ending in September 2017 and is automatically renewed for an additional five-year period unless a party thereto

provides timely notice of its intent not to renew its participation. To date, JEA has neither provided nor received aid under this agreement.

#### Interconnections

JEA is interconnected with the Georgia Integrated Transmission System through two 500 kV lines. These lines are jointly owned by JEA and FPL. The lines are located in the western section of the Electric System's service area and extend north to the interconnect point with Georgia Integrated Transmission System at the Florida-Georgia state line.

JEA belongs to the Florida Reliability Coordinating Council ("FRCC"), which is one of 10 Regional Reliability Councils of the North American Electric Reliability Corporation. The Florida member electric utility systems coordinate their operations through the FRCC Operating Committee to share spinning reserves; establish policies and procedures for dealing with scheduled and inadvertent interchanges and emergencies; coordinate maintenance schedules; establish and administer guidelines for utilizing under-frequency relays; maintain voice, facsimile and internet communications facilities; and evaluate and resolve system disturbances.

#### **Power Sales and Transmission Contracts**

As more fully described under "ELECTRIC UTILITY FUNCTIONS - St. Johns River Power Park - *Ownership*" herein, JEA and FPL have entered into the FPL-Power Park Sale, pursuant to which JEA has agreed to sell to FPL, and FPL has agreed to purchase from JEA, on a "take-or-pay" basis, 37.5 percent of JEA's 80 percent share of generating capacity of the Power Park (and associated energy) until the Power Park Joint Ownership Agreement expires in 2022 or earlier if FPL's take of energy exceeds 25 percent of JEA's 80 percent ownership of the generator nameplate capacity specified in the Power Park Joint Ownership Agreement, as further described in "FINANCIAL INFORMATION RELATING TO ELECTRIC UTILITY FUNCTIONS - Debt Relating to Electric Utility Functions - Power Park Issue Two Bonds" herein.

JEA has a contract to supply the Beaches Energy Services with non-firm generation and transmission backup service. In accordance with a 36-month contract notice provision, the contract will terminate on November 30, 2019 unless renewed prior to its expiration. JEA does not receive a significant amount of revenue from this contract.

In January 1990, JEA entered into a contract with Cedar Bay Generating Company, L.P. ("Cedar Bay"), the owner of a cogeneration facility within JEA's service territory. Pursuant to the contract, Cedar Bay is receiving transmission service for 260 MW of capacity and associated energy for delivery to FPL through JEA's transmission system. Cedar Bay began using JEA's transmission service in January 1994. FPL acquired the Cedar Bay Generating Plant effective September 1, 2015 and has officially retired the plant in December 2016. Currently, FPL is in the process of dismantling the plant.

## Transmission and Distribution System

JEA's transmission system consists of all JEA-owned bulk power transmission facilities operating at 69 kV or higher, which includes all transmission lines and associated substation facilities that end at the substation's termination structure at four voltage levels: 69 kV, 138 kV, 230 kV and 500 kV.

JEA owns a total of 745 Circuit miles of transmission lines, of which 692 are overhead miles and 53 are underground. The following table shows the breakdown of miles per kV level:

<u>Voltage (kV)</u> <u>Overhead (Miles)</u> <u>Underground (Miles)</u> <u>Total (Miles)</u>

69	113	46	159
138	204	3	207
230	300	4	304
500	<u>75</u>	_0	<u>_75</u>
Total	<u>692</u>	<u>53</u>	<u>745</u>

The 159 miles of 69 kV transmission lines are located in the dense interior section of the Electric System's service area, in the vicinity of the urban core. The 207 miles of 138 kV lines interconnect substations in most of JEA's high load and growth areas. The 304 miles of 230 kV lines form a semicircular loop around the City with transformation from the transmission system to the distribution system performed at numerous JEA facilities, which also serve the high load and growth areas. There currently are 89 substations in the JEA service territory. JEA also owns two 500 kV lines jointly with FPL. These lines are connected between the FPL Duval Substation and the GPC system at the Florida state line.

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JEA's tie lines with neighboring utilities within FRCC are:

JEA Station	<b>Neighboring Utility Station</b>	<u>Voltage (kV)</u>
Steelbald	Duval (FPL) Circuit 3	230
Brandy Branch	Duval (FPL) Circuit 1	230
Brandy Branch	Duval (FPL) Circuit 2	230
Jax Heights	Duval (FPL) Circuit 4	230
Neptune	JB Penman (BES)	138
Switzerland	Sampson (FPL)	230
Jax Heights	Black Creek (Seminole) (1)	230
Eastport	Cedar Bay (independent power producer)	138

<sup>(1)</sup> Seminole Electric Cooperative, Inc. ("Seminole")

The distribution system covers approximately 6,760 circuit miles and is composed of three voltage levels depending upon the area served. The central business district is served by a 13.2 kV underground secondary network. Surrounding residential and commercial areas are served primarily at 4.16 kV and 26.4 kV, with some 13.2 kV interspersed. Most older areas are served from overhead distribution lines. However, the majority of all new developments, subdivisions, shopping centers and apartment complexes constructed since 1968 are served by underground 26.4 kV distribution.

The transmission and distribution system is under the control of system operators through a supervisory control and data acquisition system. The control of the generation facilities and the balance of power flow over interconnection transmission facilities is managed by an automatic generation control application with system operator oversight and input as needed.

#### Area Served

The Electric System serves approximately 900 square miles, which includes virtually the entire City (Duval County), with the exception of Jacksonville Beach and Neptune Beach. The Electric System also provides retail service in portions of the northern sections of St. Johns and Clay Counties, which are located southeast and southwest of the City, respectively. The Electric System also furnishes power for resale to Florida Public Utilities Company ("FPU") for use in the City of Fernandina Beach in Nassau County, north of the City. JEA's contract with FPU expires without renewal on December 31, 2017. JEA cannot predict whether it will enter into a new contract with FPU after December 31, 2017.

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## **Customers and Sales**

In the Fiscal Year ended September 30, 2016, the Electric System served an average of 451,788 customer accounts. The following table sets forth electric revenues, the sales of the Electric System and the average number of Electric System accounts, all by customer classification, for Fiscal Years ended September 30, 2012 through 2016.

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	Fiscal Year Ended September 30,				
	2016	2015	2014	2013	2012
Electric Revenues (000's omitted):					
Residential	\$ 599,009	\$ 619,897	\$ 608,983	\$ 580,893	\$ 601,581
Commercial and industrial	596,802	627,547	632,121	617,962	670,983
Public street lighting	13,488	11,982	13,943	14,661	15,311
Sales for resale	32,204	32,424	34,700	29,989	37,153
FPL saleback	130,053	<u>128,475</u>	159,747	158,031	166,873
TOTAL	\$1,371,556	\$1,420,325	\$1,449,494	\$1,401,536	\$1,491,901
Sales (MWh):					
Residential	5,328,245	5,243,002	5,086,866	4,877,264	4,806,144
Commercial and industrial	6,834,601	6,767,836	6,636,445	6,599,249	6,670,200
Public street lighting	80,108	89,376	111,325	123,177	122,614
Sales for resale:					
Territorial	318,297	333,994	337,353	329,922	374,116
Off-system	169,037	83,367	136,342	42,286	74,852
FPL saleback	1,856,198	1,862,122	2,003,682	1,810,651	1,806,781
TOTAL	14,586,486	14,379,697	14,312,013	13,782,549	13,854,707
<b>Average Number of Accounts:</b>					
Residential	396,664	389,287	382,438	375,600	371,658
Commercial and industrial	51,472	50,867	48,999	47,709	47,230
Public street lighting	3,649	3,549	3,477	3,460	3,424
Sales for resale <sup>(1)</sup>	3	2	3	3	3
TOTAL	451,788	443,705	434,917	426,772	422,315

<sup>(1)</sup> Includes FPL but does not include the average number of off-system non-firm sales customers.

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# Largest Customers

The 10 largest customer accounts served by the Electric System (other than FPL pursuant to the FPL-Power Park Sale) composed 15.3 percent of the total MWh purchases derived from the operation of the Electric System for the Fiscal Year ended September 30, 2016. The following table sets forth the 10 largest Electric System accounts (other than sales to FPL pursuant to the FPL-Power Park Sale) by MWh purchases, during the Fiscal Year ended September 30, 2016.

Customer Accounts	MWh Purchases	Percentage <u>of Total</u>
United States Navy	357,552	2.8
Florida Public Utilities Company	310,951	2.4
Gerdau Ameristeel	287,472	2.3
WestRock	220,593	1.7
City of Jacksonville	214,697	1.7
Duval County Public Schools	171,031	1.3
Publix Supermarkets	106,070	0.8
Winn-Dixie Stores, Inc.	103,209	0.8
Southern Baptist Hospital	96,055	0.8
Johnson & Johnson Vision Care	92,691	0.7
Total	<u>1,960,321</u>	<u>15.3</u>

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<u>4831-8052-5105.13</u> <u>34</u>

## Customer Billing Procedures

Customers are billed on a cycle basis approximately once per month. If the customer has not paid a bill within 42 days after the initial bill date, JEA may discontinue service to that customer. JEA's credit and collection policies provide for deposits which vary with consumption and for late payment penalties for customers who fail to pay each month's bill within 27 days. The amount of uncollectible accounts is budgeted to be approximately 0.20 percent of estimated gross electric revenues for the Fiscal Year ending September 30, 2017. Actual uncollectible accounts were 0.14 percent of gross Electric System revenues for the Fiscal Year ended September 30, 2016.

#### Rates

JEA has sole discretion to set rate levels and revenue requirements for the Electric System, its interest in the Power Park and its interest in Scherer Unit 4. JEA sets its retail rates after a public hearing. The JEA Board has the authority to change wholesale rates without a public hearing. The PSC has the authority to review rate structures for municipal utilities in Florida, including JEA (see subsection "Regulation" of this section, below).

Each of JEA's various rates for electric service consists of "base rate" components and a "fuel and purchased power rate" component. The base rate is evaluated and adjusted as required to fund projected revenue requirements for each Fiscal Year. A comprehensive class cost of service study will be performed at a minimum of every five years to support the rates charged are based on cost. The rate for the fuel and purchased power component can adjust upward or downward as of October 1 of each year to reflect the cost of fuel and purchased power. If during the course of a Fiscal Year, such costs vary by more than 10 percent from JEA's budget, an adjustment in the fuel and purchased power component of the rate may be made, subject to the approval of the JEA Board.

In June 2011, the JEA Board approved the conversion of the \$2.90 per 1,000 kWh fuel recovery charge to base energy charges. The conversion became effective January 1, 2012.

On June 19, 2012, the JEA Board approved a decrease of the fuel and purchased power rate by \$4.14 per 1,000 kWh that became effective on July 1, 2012.

On January 19, 2016, the JEA Board approved a decrease of the fuel and purchased power rate by \$6.85 per 1,000 kWh that became effective on February 1, 2016.

On November 15, 2016, the JEA Board approved an increase to energy rates for multiple rate classes and a decrease of the fuel and purchased power rate by \$4.25 per 1,000 kWh effective on December 1, 2016. This rate restructuring was designed to lower overall bills for residential and commercial customers, improve the alignment of rates with the cost of service, enable additional early pay down of currently outstanding debt and eliminate the need for future base rate increases through Fiscal Year 2021.

Since environmental regulatory constraints and the cost of environmental compliance are anticipated to increase in the future, the JEA Board enacted an Environmental Charge of \$0.62 per 1,000 kWh, which was applied to all rate classes as of October 1, 2007. See "ELECTRIC UTILITY SYSTEM - ELECTRIC UTILITY FUNCTIONS - Environmental Matters" and "ELECTRIC UTILITY SYSTEM - ELECTRIC UTILITY FUNCTIONS - Factors Affecting the Electric Utility Industry - Future Legislation" herein.

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In order to fund JEA's comprehensive conservation and demand reduction programs (which are designed to reduce electric consumption and, at the same time, reduce the need for acquiring or constructing additional generating capacity), the JEA Board enacted a Conservation Charge, which was applied to residential electric accounts effective as of October 1, 2007, in the amount of \$0.01 per kWh for usage above 2,750 kWh in a single month.

A comparison of residential rates in selected major national cities, including fuel adjustments and franchise fees, as of January 2017, is shown in the following table, arranged by price of 1,000 kWh:

City (Utility)	<u>500 kWh</u>	<u>1,000 kWh</u>	<u>1,250 kWh</u>	<u>2,000 kWh</u>
Gainesville (GRU)	70.76	\$130.41	\$163.90	\$264.41
Pensacola (Gulf Power Company)	73.38	128.14	155.53	237.68
Key West (Keys Energy Services)	67.68	120.33	146.66	225.63
St. Petersburg (Duke Energy Florida)	60.77	112.76	144.66	240.38
JACKSONVILLE (JEA)	58.72	111.76	138.29	217.85
Ocala (Electric Dept.)	59.99	110.64	135.98	211.97
Tampa (Tampa Electric Company)	62.28	107.11	126.59	185.03
Atlanta (GPC)	61.59	106.79	128.33	192.94
Orlando (Orlando Utilities Comm.)	57.00	106.00	135.51	224.00
Tallahassee (Electric Dept.)	56.57	105.72	130.30	204.03
Miami (FPL)	53.64	98.04	127.08	210.79
Lakeland (Utilities Dept.)	53.39	97.27	120.63	193.47

Source: JEA's "Quarterly Residential Rate Comparison (January 2017)."

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A comparison of non-residential rates in selected major regional cities for certain classifications of service for December 2016 (excluding all taxes) is shown in the following table, arranged by price of non-demand 1,500 kWh service:

City (Utility)	Non-Demand 1,500 kWh	Demand 150 kW <u>60,000 kWh</u>	Demand 500 kW <u>200,000 kWh</u>
Atlanta (GPC)	\$256.92	\$5,630.68	\$20,306.43
Gainesville (GRU)	238.00	7,975.00	26,031.50
Pensacola (Gulf Power Company)	193.55	5,728.03	19,601.80
Orlando (Orlando Utilities Comm.)	165.22	5,119.20	16,994.00
St. Petersburg (Duke Energy Florida)	164.86	4,941.79	16,219.14
Ocala (Electric Dept.)	163.92	5,440.05	18,351.45
Tampa (Tampa Electric Company)	159.97	5,007.30	16,621.00
JACKSONVILLE (JEA)	155.64	5,345.20	17,619.00
Lakeland (Utilities Dept.)	141.99	4,596.97	15,418.48
Miami (FPL)	141.02	4,429.04	14,494.83
Tallahassee (Electric Dept.)	136.08	5,092.30	16,700.40

Source: For all Florida cities, Florida Municipal Electric Association, Inc.'s "Commercial/Industrial Comparison of Electric Rates" (December 2016); for Atlanta, GPC (December 2016).

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In June 2011, the JEA Board approved a 10 year Incremental Economic Development Program (IEDP) designed to provide an incentive for large industrial customers to increase electric consumption. IEDP discounts on incremental consumption in excess of a predetermined consumption baseline are described in the following table:

 Fiscal Year Ending September 30,	Base Charges Discount	Fuel Charges Discount	Baseline Load
 2012	100%	10%	lesser of
2013	100%	10%	Fiscal Year 2008
2014	75%	7.5%	
2015	50%	5%	through————————————————————————————————————
2016	25%	2.5%	Fiscal Year 2010
2017	100%	0%	amaatan a C
2018	100%	0%	greater of
2019	75%	0%	Fiscal Year 2008
2020	50%	0%	through
2021	25%	0%	Fiscal Year 2016
2022			
and thereafter	0%	0%	

[Remainder of page intentionally left blank] In August 2013, the JEA Board approved an Economic Development Program (the "EDP") designed to provide a financial incentive for new and existing commercial or industrial customers who, upon meeting certain eligibility criteria, expand their business and add jobs within the JEA service area. In January 2015 the JEA Board amended the EDP to create an increased level of incentive for customers expanding their business and adding jobs within designated areas where JEA has underutilized existing transmission and distribution capacity (Load Density Improvement areas). The EDP discount schedule is described in the following table:

	Base Charges	Discount in Load Density Improvement
<u>Year</u>	<b>Discount</b>	<u>Areas</u>
Year 1	30%	35%
Year 2	25%	30%
Year 3	20%	25%
Year 4	15%	20%
Year 5	10%	15%
Year 6	5%	10%
Year 7	0%	0%

On November 15, 2016, the JEA Board approved an Economic Stimulus Rider designed to provide a financial incentive for new commercial or industrial customers to locate within the JEA service area. This rate rider would allow JEA to negotiate rates in certain controlled circumstances, given the following:

- (i) Legal attestation by the customer (through an affidavit signed by an authorized representative of the customer) to the effect that, but for the application of the rider, the new load would not be served by JEA; and
- (ii) Documentation demonstrating to JEA's satisfaction that there is a viable lower cost alternative to the customers taking electric service from JEA.

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#### Regulation

Municipal electric utilities in the State of Florida, including JEA, are not subject to state regulation except for certain environmental matters, power plant and large transmission line siting, rate structures, certain conservation activities, certain safety standards and certain provisions of the Grid Power Bill. Section 366.04(5), Florida Statutes, a part of the Grid Power Bill, states that the PSC "shall further have jurisdiction over the planning, development, and maintenance of a coordinated electric power grid throughout Florida to assure an adequate and reliable source of energy for operational and emergency purposes in Florida and the avoidance of further uneconomic duplication of generation, transmission, and distribution facilities." In 1974, the Florida legislature enacted a statute which confers jurisdiction on the PSC to regulate "rate structures" of all utilities, including municipal utilities. In 1975, the PSC ruled that the statute does not confer ratemaking jurisdiction over municipal electric systems by distinguishing between "rates," as relating to determination of the revenues required by the utility, and "rate structures," as relating to the method by which revenues are generated.

The Florida legislature, in 1986, amended Section 366.04, Florida Statutes, which authorizes the PSC to prescribe and enforce safety standards for transmission and distribution facilities owned and operated by investor-owned electric utilities ("IOU's") and municipal- and cooperatively-owned electric utilities within the State of Florida. The PSC has adopted the National Electric Safety Code as its standard in this regard, and JEA believes it is currently in full compliance.

The Florida Electric Power Plant Siting Act, administered by the Florida Department of Environmental Protection (the "FDEP"), gives the PSC exclusive authority to determine the need for electric power plants. The Florida Transmission Line Siting Act, also administered by the FDEP, gives the PSC exclusive authority to determine the need for all transmission lines with voltages of 230 kV or greater which cross county lines. The Florida Department of Transportation ("FDOT") regulates the construction of new transmission and distribution lines which cross FDOT rights-of-way. The FDEP must approve the construction of transmission and distribution lines across FDEP-protected lands. Transmission and distribution lines which cross navigable waters are regulated by the Army Corps of Engineers, the FDEP and the SJRWMD.

Existing and proposed interconnection agreements with IOU's are subject to review and approval by FERC. The Energy Policy Act of 1992 conferred on FERC the power to order any "transmitting utility" to perform wheeling services. The term "transmitting utility" is defined to include municipal utilities, such as JEA. In addition, "transmitting utilities" are subject to FERC reporting requirements. See "ELECTRIC UTILITY SYSTEM - ELECTRIC UTILITY FUNCTIONS - Factors Affecting the Electric Utility Industry - Energy Policy Act of 1992," "- FERC Transmission Initiatives" and "- Energy Policy Act of 2005" below.

## Capital Program

The Electric System's capital program consists of (a) capital requirements for improvements to existing generating facilities that are determined to be necessary as a result of JEA's annual resource planning process, and (b) JEA's remaining capital requirements for transmission and distribution facilities and other capital items. The projected total amount of the capital program for the five-year period ending September 30, 2021 is shown in the following table.

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# Electric System Capital Program (000's omitted)

Fiscal Year Ending	
September 30,	<u>Amount</u>
2017	\$166,000
2018	195,000
2019	152,000
2020	110,000
2021	113,000
Total	\$736,000

The total amount of the capital program for the five-year period ending September 30, 2021 is estimated to be approximately \$736 million. JEA expects the total amount required for the capital program will be derived from revenues and other available funds of the Electric System. The projected total amount of the capital program may be affected by future environmental legislation and regulation. See "ELECTRIC UTILITY SYSTEM - *ELECTRIC UTILITY FUNCTIONS* - Environmental Matters" and "ELECTRIC UTILITY SYSTEM - *ELECTRIC UTILITY FUNCTIONS* - Factors Affecting the Electric Utility Industry" herein.

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#### St. Johns River Power Park

## **General Description**

The St. Johns River Power Park, a coal- and petcoke-fired steam electric generating station, is located on an approximately 1,900-acre site in the northeast section of the City and consists of two units, each having a current average net capability of 638 MW. The two units are essentially identical in design and share certain common facilities, including fuel handling and storage facilities, four on-site water wells, a demineralized water treatment system, a wastewater treatment facility, switchyards and miscellaneous buildings.

The term "Power Park" is used in this Annual Disclosure Report to mean the Joint Facilities, as that term is defined in the "Agreement for Joint Ownership, Construction and Operation of the St. Johns River Power Park Coal Units #1 and #2" dated as of April 2, 1982, as amended (the "Power Park Joint Ownership Agreement"), between JEA and FPL. The Joint Facilities are defined in the Power Park Joint Ownership Agreement to mean a coal-fired, steam electric generating facility consisting of two units, together with their associated improvements.

#### **Ownership**

The Power Park is owned and operated by JEA and FPL pursuant to the provisions of the Power Park Joint Ownership Agreement. A summary of certain provisions of the Power Park Joint Ownership Agreement is attached hereto as APPENDIX G. JEA owns an undivided 80 percent interest in the Power Park, and FPL owns the other 20 percent. JEA and FPL each fund a corresponding share of ongoing costs and are entitled to a corresponding share of the generating capacity of the Power Park.

Pursuant to the "FPL-Power Park Sale" previously referred to, JEA has also agreed to sell, and FPL has agreed to purchase, on a "take-or-pay" basis, 37.5 percent of JEA's 80 percent share of the generating capacity of the Power Park, resulting in each utility receiving 50 percent of the Power Park's capacity and related energy until the Power Park Joint Ownership Agreement expires in 2022, subject to

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the limitation that FPL's right to receive such capacity and related energy shall be suspended if and when the receipt by FPL of any additional amount of energy from such sale would exceed the limitation contained in the Power Park Joint Ownership Agreement. Purchase payments must be made by FPL whether or not the Power Park is operable or operating and notwithstanding the suspension, interruption, interference, reduction or curtailment of the output of the Power Park for any reason. For a discussion of FPL's use of the capacity and related energy to which it is entitled pursuant to the FPL-Power Park Sale through September 30, 2014,2016, see "ELECTRIC UTILITY SYSTEM - FINANCIAL INFORMATION RELATING TO ELECTRIC UTILITY FUNCTIONS - Debt Relating to Electric Utility Functions - Power Park Issue Two Bonds" herein. After expiration of the Power Park Joint Ownership Agreement, JEA will receive 80 percent of the Power Park's capacity and related energy output.

JEA has entered into an agreement in principle with FPL for an early termination of the Power Park Joint Ownership Agreement and cessation of commercial operations in January 2018 with decommissioning of the plant to occur thereafter. See "ELECTRIC UTILITY SYSTEM – ELECTRIC UTILITY FUNCTIONS – St. John's River Power Park – Early Termination of Power Park Joint Ownership Agreement" for additional information.

The operation of the Power Park is dependent upon the financial ability of JEA and FPL to provide the necessary funds to pay the costs thereof. JEA cannot give any assurance as to the ability of FPL to abide by its "take-or-pay" obligation under the Power Park Joint Ownership Agreement for the purchase of part of the generating capacity of JEA's interest in the Power Park.

## Early Termination of Power Park Joint Ownership Agreement

On March 21, 2017, JEA's Board was informed by staff of an agreement in principle with FPL for an early termination of the Power Park Joint Ownership Agreement and cessation of commercial operations in January 2018 with decommissioning of the Power Park to occur thereafter. The agreement in principle between JEA and FPL is subject to negotiation, execution and delivery of mutually satisfactory definitive agreements between JEA and FPL and final approval from JEA's Board, FPL's governing body and regulatory agencies. JEA and FPL executed a term sheet on March 21, 2017 in connection with the proposed transaction.

Upon the receipt of all required approvals, including approval of JEA's Board, and the ceasing of commercial operation of the Power Park (the "Closing"), FPL will make a payment to JEA in consideration of the early termination of the Power Park Joint Ownership Agreement. Upon completion of the dismantlement of the Power Park, FPL will assign its right, title and interest in and to the land upon which the Power Park is situated to JEA. On or before the Closing, FPL and JEA will deposit amounts, which together with funds on deposit in the debt service reserve fund, will be sufficient to defease all outstanding debt issued under the First Power Park Resolution. As required by the terms of the Power Park Joint Ownership Agreement, FPL will pay its share of the costs of retirement and dismantlement of the Power Park; provided, however, FPL will not contribute to the costs of remediation associated with any portions of the Power Park that JEA preserves for its beneficial use. Debt issued under the Second Power Park Resolution is currently expected to remain outstanding and not be defeased in connection with the Closing.

The total costs for the retirement and dismantlement of the Power Park are estimated to be in an amount ranging from \$120 million to \$150 million and will be paid during JEA fiscal years ending September 30, 2018 and September 30, 2019. JEA's portion of the total costs is estimated to range from \$96 million to \$120 million.

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#### Management

The Power Park is managed by a number of functional committees. Each of these committees consists of two persons appointed respectively by the managements of JEA and FPL. Each committee member has an equal vote. In case of disagreement, the appeal path involves the Executive Committee, JEA and FPL managements, and finally, with the written consent of both JEA and FPL, an independent arbitrator. In all cases, the JEA member of each committee is the lead manager in executing the functions of that committee. JEA provides all management and staffing below the committee level, unless otherwise agreed to by JEA and FPL. Since the date that JEA and FPL entered into the Power Park Joint Ownership Agreement, there has been only one case of disagreement, which subsequently was resolved.

# **Operation**

The following table shows the total plant capacity factors for the Power Park since 2012. The capacity factor is a measure of the actual output as a percentage of the theoretical maximum output of a generating plant, or an individual unit, as the case may be.

Fiscal Year	Power Park Capacity Factor			
Ended September 30,	<b>Unit 1 (%)</b>	<b>Unit 2 (%)</b>	Total (%)	
$2012^{(1)}$	55.9	51.4	53.6	
$2013^{(2)}$	58.1	62.6	60.4	
$2014^{(3)}$	71.3	55.9	63.6	
$2015^{(4)}$	50.5	59.2	54.9	
2016(5)	46.0	44.6	45.3	

- (1) During this period, Unit 2 underwent a six-week planned outage.
- (2) During this period, Unit 1 underwent a five-week planned outage.
- (3) During this period, Unit 2 underwent a 12-week planned outage.
- (4) During this period, Unit 1 underwent a 10-week planned outage.
- (5) During this period, Unit 2 underwent a five-week planned outage.

JEA dispatches Power Park economically against a diverse portfolio of generating units. Gas fired units were especially competitive in 2016 as a result of low gas prices. The relative economic competitiveness of Power Park is reflected in the capacity factor.

#### **Transmission Arrangements**

The Power Park is interconnected with the Electric System's transmission system at the 230 kV level. The transmission lines deliver power from the Power Park site to substations in the Jacksonville area. Pursuant to the Power Park Joint Ownership Agreement, FPL pays to the Electric System a charge for providing transmission service through the Electric System's transmission grid.

## Fuel Supply and Transportation

The Power Park was designed with boilers and air quality control systems ("AQCS") that permit the use of coal from a wide range of domestic and foreign sources. JEA currently has a long-term coal supply contract with Coal Marketing Company (representing the El Cerrejón project in Colombia) for the purchase of 2,500,000 tons of coal in 2017. JEA has no other coal purchases committed for delivery to Power Park.

The Power Park is permitted to burn a blend of up to 30 percent petcoke and 70 percent coal. Selective catalytic reduction ("SCR") technology was installed at the Power Park and placed in service in

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2009. As a result, it was decided to not burn petcoke at the Power Park in 2009 in order to minimize potential concerns during the start-up of the SCR equipment. The reintroduction of petcoke at the Power Park continues to depend on its economic and environmental feasibility.

The Power Park includes a fuel storage facility that allows for storage of a maximum 90-day supply at normal plant output; JEA customarily maintains a 35- to 45-day inventory. The Power Park also includes a facility for the delivery of waterborne fuel consisting of a dock, traveling clam-shell unloader and 3.5 miles of overland conveyor to the Power Park. The dock can also accommodate self-discharging vessels as well as traditional Panamax bulk carriers. Currently, JEA transports domestic coal by rail and foreign coal and petcoke by water. JEA's agreement with CSX Transportation for rail transportation services to the Power Park expired on December 31, 2016. JEA intends to return to the lessor 350 leased aluminum rotary railcars in May 2017. In 2015, JEA utilized CSX Transportation to deliver approximately 385,000 tons of coal to the Power Park. This volume was under the annual requirement established in JEA's 2011 contract with CSX Transportation for transportation services during 2012-2016. The 2016 volume was also under the annual requirement. Both the 2015 volume and the 2016 volume were under the annual requirement due to unforeseen changes in environmental regulations.

The shortfalls are due to EPA's Mercury and Air Toxics Standards (MATS) rule established in April 2012 that went into effect on April 16, 2015. Because the new environmental standards have limited JEA's ability to utilize domestic coal, JEA provided CSX Transportation with a notice of force majeure on September 10, 2014. CSX Transportation rejected the force majeure declaration and is in the process of assessing JEA's performance under the contract. JEA's maximum responsibility for 2015 and 2016 shortfall would be \$7.4 million in liquidated damages. The Power Park co-owners (JEA and FPL) and CSX Transportation have entered into the contractual dispute resolution process.

# Capital Program

The information provided below assumes that the cessation of commercial operations of the Power Park in January 2018 occurs pursuant to the agreement in principle entered into between JEA and FPL. See "ELECTRIC UTILITY SYSTEM – *ELECTRIC UTILITY FUNCTIONS* – St. John's River Power Park – *Early Termination of Power Park Joint Ownership Agreement*" for additional information.

The Power Park's capital program consists of minor renewals and replacements, power plant improvements—and upgrades, plus other capital items, including EPA Steam Electric Effluent Limitation—Guidelines compliance upgrades starting in 2018. JEA anticipates that its share of capital improvements at the Power Park will involve total expenditures of approximately \$556 million over the next five years.

JEA's share of the Power Park's projected capital improvements per year for the five-year period ending September 30, 2021 is summarized below.

# Power Park Capital Program (000's omitted)

Fiscal Year	
Ending September 30,	<u>Amount</u>
2017	\$ <del>-9,000</del> 6,000
2018	<del>10,000</del> 0
2019	10,000 <u>0</u>
2020	15,000 <u>0</u>
2021	<u>11,000</u> 0
Total	\$ <del>55,000</del> 6,000

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It is expected that the total amount of JEA's share of the capital program will be provided from available funds of the Power Park. See "ELECTRIC UTILITY SYSTEM - FINANCIAL INFORMATION RELATING TO ELECTRIC UTILITY FUNCTIONS - Debt Relating to Electric Utility Functions - Power Park Issue Three Bonds" herein. The projected total amount of the capital program may be affected by future environmental legislation and regulation. See "ELECTRIC UTILITY SYSTEM - ELECTRIC UTILITY FUNCTIONS - Environmental Matters" and "ELECTRIC UTILITY SYSTEM - ELECTRIC UTILITY FUNCTIONS - Factors Affecting the Electric Utility Industry" herein.

#### Scherer 4

#### **General Description**

Scherer Unit 4 is one of four coal-fired steam units located at the Robert W. Scherer Electric Generating Plant ("Plant Scherer") on a 12,000-acre site near the Ocmulgee River approximately three miles east of Forsyth, Georgia. Scherer Unit 4 has a current net maximum output of 846 MW and was placed in service in February 1989. Pursuant to the Plant Robert W. Scherer Unit Number Four Amended and Restated Purchase and Ownership Participation Agreement, dated as of December 31, 1990, as amended, among GPC, FPL and JEA (the "Scherer Unit 4 Purchase Agreement"), JEA purchased an aggregate of 23.64 percent of Scherer Unit 4, and FPL purchased an aggregate of 76.36 percent of Scherer Unit 4. In addition to the purchase of undivided ownership interests in Scherer Unit 4, under the Scherer Unit 4 Purchase Agreement, JEA and FPL also purchased proportionate undivided ownership interests in (i) certain common facilities shared by Units 3 and 4 at Plant Scherer, (ii) certain common facilities shared by Units 1, 2, 3 and 4 at Plant Scherer and (iii) an associated coal stockpile. Under a separate agreement, JEA also purchased a proportionate undivided ownership interest in substation and switchyard facilities. A summary of certain provisions of the Scherer Unit 4 Purchase Agreement and certain related agreements is attached hereto as APPENDIX H.

#### **Ownership**

As stated above, JEA and FPL are the owners of Scherer Unit 4 with undivided ownership interests of 23.64 percent and 76.36 percent, respectively; and JEA and FPL have proportionate ownership interests in the common facilities associated with all four units located at Plant Scherer. Oglethorpe, MEAG Power, GPC and the City of Dalton, Georgia ("Dalton"), as co-owners of Scherer Units 1 and 2, and Gulf Power Company ("Gulf Power") and GPC, as co-owners of Scherer Unit 3, also have proportionate undivided ownership interests in such common facilities. FPL and JEA also have proportionate undivided ownership interests in the common facilities shared by Scherer Units 3 and 4. GPC and Gulf Power, as co-owners of Scherer Unit 3, also have proportionate ownership interests in such common facilities (see "SUMMARY OF CERTAIN PROVISIONS OF AGREEMENTS RELATING TO SCHERER UNIT 4 - Scherer Unit 4 Purchase Agreement" in APPENDIX H attached hereto).

Oglethorpe, MEAG Power, Dalton, Gulf Power, GPC, FPL and JEA have entered into the Plant Scherer Managing Board Agreement which, among other things, established a managing board to coordinate the implementation and administration of various ownership agreements relating to Plant Scherer, including the establishment of standards, rules and policies for fuel procurement and the method of voting on issues affecting the various components of Plant Scherer in which all co-owners have an interest.

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## **Operation**

The following table shows the total plant availability factors and capacity factors for Scherer Unit 4 since 2012.

	Scherer Unit 4		
<u>Calendar</u>	<b>Availability</b>	<b>Capacity</b>	
<u>Year</u>	Factor (%)	Factor (%)	
2012 <sup>(1)</sup>	79.3	64.3	
2013	96.2	85.4	
2014 <sup>(2)</sup>	75.5	57.7	
2015	99.0	76.9	
2016 <sup>(3)</sup>	84.6	64.9	

- (1) During this period, Scherer Unit 4 underwent a 10-week planned outage.
- (2) During this period, Scherer Unit 4 underwent an 11-week planned outage.
- (3) During this period, Scherer Unit 4 underwent a four-week planned outage.

#### **Transmission Arrangements**

As a part of the purchase by JEA of its interest in Scherer Unit 4, GPC and Southern Company Services, Inc. provide JEA with firm transmission service through the GPC system to the Florida/Georgia border for delivery of the output of JEA's ownership interest in Scherer Unit 4 for the life of the unit. Transmission rates are computed by formulae contained within the agreement and are filed with, and under the jurisdiction of, FERC.

# Fuel Supply

GPC, under JEA's direction, purchases coal for JEA's use of its ownership interest in Scherer Unit 4. JEA has the option to procure its own coal. In 1994, Scherer 4 began burning sub-bituminous coal from the Powder River Basin ("PRB") located in the western region of the United States. JEA owns 214 aluminum railcars to deliver the PRB coal for use at Plant Scherer. Plant Scherer has in place a Btu accounting system to allocate fuel costs among the owners.

To provide for transportation of coal for Scherer Unit 4, GPC negotiated two agreements with rail carriers during Fiscal Years ended September 30, 2002 and September 30, 2003. The term of the agreement with Burlington Northern and Santa Fe Railway Company ("BNSF") has been extended through calendar year 2028. The current agreement with Norfolk Southern Railway Company extends through December 2019.

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## Capital Program

JEA's share of the Scherer 4 Project's projected capital program per year for the five-year period ending September 30, 2021 is summarized below.

# Scherer 4 Project Capital Program (000's omitted)

Fiscal Year Ending	
September 30,	<b>Amount</b>
2017	\$10,000
2018	19,000
2019	4,000
2020	8.000

2021 <u>3,000</u> Total \$44,000

The total amount of the capital program for the five-year period is estimated to be approximately \$44 million. JEA expects that the total amount required to fund the capital program will be provided from available funds of the Bulk Power Supply System. The projected total amount of the capital program may be affected by future environmental legislation and regulation. See "ELECTRIC UTILITY SYSTEM - *ELECTRIC UTILITY FUNCTIONS* - Environmental Matters" and "ELECTRIC UTILITY SYSTEM - *ELECTRIC UTILITY FUNCTIONS* - Factors Affecting the Electric Utility Industry" herein.

## **Resource Requirements**

#### **Capacity**

JEA must have sufficient resources to serve expected firm customer demands in the future. The capacity required consists of forecasted annual peak demands (net of interruptible demands) and a reserve margin necessary to allow for routine and emergency equipment outages and demand forecast variances. The installed capacity consists of existing Electric System generating units, JEA's share of the Power Park and JEA's interest in Scherer Unit 4. The difference between firm capacity required (including the reserve margin) and installed capacity is the net capacity surplus or deficit.

JEA applies the general rule that reserve capacity should be at least 15 percent of the projected seasonal firm peak demand. This reserve amount is added to projected firm peak demand to determine the seasonal capacity required. This approach is considered reasonable and prudent, particularly in light of JEA's strong transmission ties with FPL and Southern. After allowing for the transmission capacity necessary to import its capacity from Scherer Unit 4, JEA owns approximately 1028 MW of additional transmission import capacity. The remainder is made available for economy purchases by JEA or is made available to others for transmission service under FERC Order No. 888 (see "ELECTRIC UTILITY SYSTEM - ELECTRIC UTILITY FUNCTIONS - Factors Affecting the Electric Utility Industry - FERC Transmission Initiatives" herein):888.

As part of its strategic planning process, JEA re-evaluates its resource needs annually. The results of JEA's 2017 resource requirements study are shown below in the table entitled "PROJECTED AVAILABLE CAPACITY AND REQUIREMENTS." JEA's 2017 resource requirements study reflected JEA's most recent peak demand and energy forecast, which continued to identify JEA as a winter-peaking utility. The study also reflected the use of interruptible and curtailable rates. JEA's resource plan is expected to satisfy JEA's need for capacity through the listed operating period.

#### Option to Purchase Interest in Lee Nuclear Station

On February 1, 2011 JEA entered into an option agreement with Duke Energy Carolinas, LLC ("Duke Carolinas"), a wholly-owned subsidiary of Duke Energy Corporation, pursuant to which JEA has the option (but not the obligation) to purchase an undivided ownership interest of not less than five percent and not more than 20 percent of the proposed two-unit nuclear station currently known as William States Lee III Nuclear Station, Units 1 & 2 to be constructed at a site in Cherokee County, South Carolina (the "Lee Project"). The Lee Project is currently planned to have 2,234 MW of electric generating capacity with a projected on-line date of 2026 with respect to Unit 1 and 2028 with respect to Unit 2. The total cost of the option was \$7.5 million. JEA obtained this option in furtherance of its target to acquire up to 30 percent of JEA's energy requirements from nuclear sources by 2030. JEA is evaluating potential transmission paths.

The option agreement requires that JEA and Duke Carolinas complete negotiation of an ownership agreement and an operation and maintenance agreement for the Lee Project prior to JEA's

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exercising the option. The option exercise period will be opened by Duke Carolinas after it (i) receives NRC approval of the combined construction and operating license for the Lee Project (such approval was obtained on December 21, 2016) and (ii) executes an engineering, procurement and construction agreement for the Lee Project. Once the exercise period is opened, JEA will have 90 days within which to exercise the option; and if it does exercise the option, it must upon such exercise specify the percentage undivided ownership interest in the Lee Project that it will acquire.

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

Under certain circumstances should the Lee Project be terminated by Duke Carolinas, Duke may be obligated to provide JEA with options for alternative resources (but not necessarily from nuclear resources) to replace JEA's optionable portion of the projected Lee Project capacity. Such alternative resources are to be available to JEA in a substantially similar timeframe (*i.e.*, within two years of the projected on-line date) as currently planned for the Lee Project.

# System Load

From 2012 to 2016, the peak demand for power on JEA's Electric System increased at a compound annual rate of 0.9 percent per year. From 2012 to 2016, energy output increased at a compound annual rate of 1.4 percent per year. JEA experienced its highest instantaneous peak of 3,250 MW on January 11, 2010. The yearly recorded values were as follows:

Fiscal <u>Year</u>	System Peak Demand (MW) <sup>(1)</sup>	Percent Change From Previous <u>Year</u>	Annual Net Energy For Load (GWh) <sup>(2)</sup>	Percent Change From Previous <u>Year</u>
2012	2,665	(13.0)	12,325	(7.9)
2013	2,596	(2.6)	12,326	0.0
2014	2,823	8.7	12,572	2.0
2015	2,863	1.4	12,866	2.3
2016	2,763	(3.5)	13,053	1.5

<sup>(1)</sup> The highest 60 minute net integrated peak demand for that year.

JEA's peak load forecast, which is based on weather-normalized load and energy data, together with JEA's projections for available generation and firm power purchases, is shown in the following tables.

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<sup>(2)</sup> Does not include the FPL-Power Park Sale or other off-system sales.

# PROJECTED AVAILABLE CAPACITY AND REQUIREMENTS (1) (MW)

Fiscal <u>Year</u>	Firm Winter Peak <u>Demand<sup>(2)</sup></u>	Capacity Reserves	Firm Winter Peak Demand Plus Capacity <u>Reserves <sup>(3)</sup></u>	Electric System <u>Capacity<sup>(4)</sup></u>	Firm Power <u>Purchases<sup>(5)</sup></u>	Power <u>Park<sup>(6)</sup></u>	Scherer <u>Unit 4</u>	Installed Capacity and Net Firm Power <u>Purchases<sup>(3)</sup></u>	Available Capacity Surplus <sup>(3)</sup>
2017	2,823	423	3,246	2,896	15	638	194	3,743	497
2018	2,766	415	3,181	<del>2,372</del> <u>2,896</u>	<del>15</del> <u>240</u>	<del>638</del> 0	194	<del>3,219</del> <u>3,330</u>	<del>38<u>149</u></del>
2019	2,797	420	3,216	<del>2,372</del> 2,896	<u>6231</u>	<del>638</del> 0	194	<del>3,210</del> <u>3,321</u>	<del>(6)</del> 105
2020	2,825	424	3,249	<del>2,372</del> 2,896	<del>106</del> 161	1,020 <u>0</u>	194	<del>3,692</del> <u>3,251</u>	443 <u>2</u>
2021	2,848	427	3,275	<del>2,372</del> 2,896	206	1,020 <u>0</u>	194	<del>3,792<u>3,296</u></del>	<del>517</del> 21

Fiscal <u>Year</u>	Firm Summer Peak <u>Demand<sup>(2)</sup></u>	Capacity <u>Reserves</u>	Firm Summer Peak Demand Plus Capacity Reserves <sup>(3)</sup>	Electric System <u>Capacity<sup>(4)</sup></u>	Firm Power <u>Purchases<sup>(5)</sup></u>	Power <u>Park<sup>(6)</sup></u>	Scherer <u>Unit 4</u>	Installed Capacity and Net Firm Power <u>Purchases<sup>(3)</sup></u>	Available Capacity Surplus <sup>(3)</sup>
2017	2,659	399	3,057	2,573	15	626	194	3,408	351
2018	2,609	391	3,000	<del>2,049</del> <u>2,573</u>	<del>135</del> <u>240</u>	<del>626</del> 0	194	<del>3,004</del> <u>3,007</u>	4 <u>7</u>
2019	2,636	395	3,032	<del>2,049</del> <u>2,573</u>	<del>106</del> <u>331</u>	1,002 <u>0</u>	194	<del>3,351</del> <u>3,098</u>	<u>319</u> <u>66</u>
2020	2,653	398	3,051	<del>2,049</del> <u>2,573</u>	<del>206</del> 406	1,002 <u>0</u>	194	<del>3,451</del> <u>3,173</u>	4 <del>00</del> 122
2021	2,665	400	3,065	<del>2,049</del> <u>2,573</u>	<del>206</del> 406	1,002 0	194	<del>3,451</del> <u>3,173</u>	<del>386</del> <u>108</u>

<sup>(1)</sup> The projected figures contained herein are forward-looking statements and are subject to change without notice. These figures are based on current conditions and assumptions, including JEA's growth assumptions, environmental regulations, fuel prices, fuel availability and other factors in effect as of the date hereof and are subject to significant regulatory, business, economic and environmental uncertainties and contingencies. Events may occur and circumstances may change subsequent to the date hereof that would have a material impact on the projections presented herein. The achievement of certain results contained in such forward-looking statements involves known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those stated in the forward-looking statements. JEA does not commit to issue any updates or revisions to those forward-looking statements if or when its expectations change, or events, conditions or circumstances on which such statements are based occur or fail to occur.

- (2) Peak demand:
  - (a) does not include expected interruptible/curtailable loads.
  - (b) includes Demand-Side Management.
  - (c) includes Plug-In Electric Vehicle (PEV) penetration.
  - (d) Florida Public Utilities Company (FPU) contract which expires December 31, 2017 not renewed by JEA.
- (3) Totals may not add due to rounding.
- (4) Figures include the following considerations:
  - (a) No capacity additions occur in the planning horizon.
  - (b) Northside Unit 3 placed in reserve storage SIRPP Units 1&2 retired starting winter January 2018 and retired June 2019.
  - c) Diesel capacity rating in winter, gas capacity rating in summer for Kennedy CTs 7 & 8 and Brandy Branch CTs 1-3.
  - (d) Gas capacity ratings in winter and summer for Greenland CTs.
- (5) Firm Power Purchases include:
  - (a) TRE Phase I: 9 net MW clean power purchase starting winter 2008 and expires December 2018.
  - (b) TRE Phase II: 6 net MW clean power purchase starting winter 2015.
  - (c) Market purchases are needed in the summer of 2018 (120 MW). Annual Firm Purchased Power Agreement for Natural Gas Combined Cycle capacity and energy January 2018 (225 MW).
  - (d) Seasonal market purchases needed summers 2020-2021 (200 MW) and winter 2020 (55 MW).
  - (e) Vogtle Units 3 and 4: 100 MW each unit delivered from MEAG June 2019 and June 2020.
  - JEA's 50 percent entitlement prior to the 80 percent entitlement of the Power Park projected starting June 2019 decommissioning planned for January 2018.

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## **Environmental Matters**

JEA is subject to numerous federal, state, and local environmental regulations resulting in environmental liabilities due to compliance costs associated with new regulatory initiatives, enforcement actions, legal actions and contaminated site assessment and remediation. Based on analysis of the cost of remediation and other identified environmental contingencies, as of September 30, 2016, JEA had accrued liabilities of approximately \$18,556,000 related to environmental matters, of which approximately \$13,836,000 is associated with the expected cost of remediating the former

wood-preserving facility at the Kennedy Generating Station. There are other environmental matters that could have an impact on JEA; however, the resolution of these matters is uncertain, and no accurate prediction of range of loss is possible at this time. For a further discussion of certain pending litigation relating to environmental matters, see the discussion under the captions "Pollution Remediation Obligations" and "Northside Generating Station Byproduct" in Note 16 to the financial statements of JEA set forth in APPENDIX A of this Annual Disclosure Report. See also "ELECTRIC UTILITY SYSTEM - ELECTRIC UTILITY FUNCTIONS - Environmental Matters - Other Environmental" herein.

While the final outcome of the proceedings referred to above cannot be predicted with certainty, JEA does not believe that its potential liabilities arising from such proceedings, either individually or in the aggregate, will have a material adverse effect upon its financial position, results of operations or liquidity.

# Global Climate Change

Over the past 25 years, environmental concerns of the public, the scientific community and Congress have resulted in legislation that has had, and is expected to continue to have, a significant impact on the electric utility industry. Based on the increasing intensity of national and international attention to climate change, federal and state legislative and/or regulatory actions/discussions have been ongoing in this area.

Specific regulations with significant impact to JEA are described below.

In 1990, legislation was enacted (the "1990 Amendments") that substantially revised the Federal Clean Air Act (the "Clean Air Act"). A main feature of the 1990 Amendments is the reduction of sulfur dioxide ("SO<sub>2</sub>") and nitrogen oxide ("NOx") emissions caused by electric utility power plants, particularly those fueled by oil and coal. The SO<sub>2</sub> reduction was to be achieved in two phases. Phase I addressed specific high sulfur emitting generating units named in the 1990 Amendments and was effective on January 1, 1995.

In Phase II, which became effective on January 1, 2000, total U.S. SO<sub>2</sub> emissions are capped at 8,900,000 tons per year. The 1990 Amendments contained provisions for allocating emission allowances to power plants based on historical or calculated levels. An allowance is defined as the authorization to emit one ton of SO<sub>2</sub>. An "Affected Unit" is defined as a unit that is subject to emission reduction requirements or limitations under the United States Environmental Protection Agency ("EPA") Acid Rain Program.

In 2009, the EPA issued final rules that require mandatory reporting of greenhouse gases ("GHG") emissions from all sectors of the economy. The rules require reporting by fossil fuel suppliers and industrial gas suppliers, direct GHG emitters and manufacturers of heavy-duty and off-road vehicles and engines. Electric generating units ("EGUs") subject to the Clean Air Act's Acid Rain Program would continue to measure  $CO_2$  emissions as presently performed and report based on those measurements. Annual reports are due by March 31 each year.

Under the structure of the Clean Air Act, permits are required for all sectors of the economy that have activities that meet the definition of a "major source" of GHG emissions under the Clean Air Act. Covered entities will immediately be subject to Prevention of Significant Deterioration ("PSD") and Title V permitting regimes, including requirements that construction of new sources or modifications to existing sources that will significantly increase GHG emissions install Best Available Control Technology ("BACT") to limit those emissions.

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EPA final PSD and Title V Greenhouse Gas Tailoring Rule (the "Tailoring Rule"), which provided a three-stage phase-in of Clean Air Act PSD and Title V operating permit requirements for GHGs from stationary sources, became applicable to GHG emissions on January 2, 2011.

Under the first phase, PSD and Title V requirements only apply to GHGs at sources that are already subject to these programs as a result of their non-GHG emissions. In the second and third phases, PSD and Title V requirements can apply to sources on the basis of GHG emissions alone, even if non-GHG emissions are not high enough to trigger current PSD and Title V requirements. The second and third phase of the Tailoring Rule and any related assessments were rendered irrelevant by a U.S. Supreme Court ruling in 2014. EPA's Tailoring Rule was initially upheld by the U.S. Court of Appeals for the District of Columbia Circuit, but, on June 23, 2014, the U.S. Supreme Court reversed in part and affirmed in part. The Supreme Court held that the Clean Air Act neither compels nor permits EPA to require compliance with PSD or Title V requirements solely on the basis of GHG emissions but that EPA reasonably interpreted the Act to require a source that must obtain a PSD permit based on its emission of non-GHG emissions to also comply with BACT requirements for GHGs. On remand from the Supreme Court, the U.S. Court of Appeals for the District of Columbia Circuit issued an amended judgment on April 10, 2015 that held that the Tailoring Rule was vacated to the extent it required sources to obtain PSD or Title V permits solely on the basis of GHG emissions and directed EPA to take steps to rescind or revise applicable regulations to reflect the Court's judgment. EPA has issued guidance indicating that it will no longer seek to apply the second or third phase of the Tailoring Rule but will continue to implement the first phase and will undertake additional future rulemaking. In early October 2016, EPA proposed revisions in response to the June 2014 U.S. Supreme Court's decision that invalidated GHG-only PSD permitting under EPA's Tailoring Rule. The proposal revised a variety of provisions to comply with the Court's ruling, and established a significant emissions rate threshold for GHGs of 75,000 tons per year CO<sub>2</sub>, which would determine whether a source that triggers PSD for conventional pollutants is required to conduct a BACT analysis for GHGs. EPA accepted comments on the revisions until December 16, 2016, and JEA cannot determine the impact of this rule or any future related regulatory actions on its facilities at this time.

On December 23, 2010, the EPA announced that it would propose performance standards for GHG emissions from new and refurbished power plants in July 2011, with the final rules to be issued in May 2012. After a delay by the EPA in issuing such performance standards, on March 27, 2012, the EPA released a proposed rule that would establish New Source Performance Standards ("NSPS") for CO<sub>2</sub> emissions from new fossil fuel-fired EGUs (the "Proposed Rule"). On June 25, 2013, the EPA was directed, via Presidential Memo (the "Memo"), to revise the Proposed Rule and issue a new proposal for new power plants by September 20, 2013, which the EPA did.

The Memo further directed the EPA to develop GHG emission standards for existing power plants, and for modified and reconstructed power plants, on a more extended schedule.

On October 23, 2015, EPA published final performance standards for carbon emissions from new, modified and reconstructed electric generating units, establishing standards of performance for CO<sub>2</sub> emissions from these units (the "Carbon Pollution Standards"). On the same date, EPA issued final guidelines for existing power plants, called the Clean Power Plan ("CPP"), which requires states to regulate CO<sub>2</sub> emissions from existing fossil fuel-fired power plants. This rule requires Florida to achieve a CO<sub>2</sub> emissions rate reduction of 26 percent by 2030, with interim CO<sub>2</sub> reduction goals over the period of 2022 to 2029.

Under the CPP, each state would be required to submit for EPA approval a plan for achieving the mandated emissions reductions. If a state failed to submit a plan then EPA would be able, under the CPP, to impose a federal plan. States have at least 1 year (up to 3 years in special circumstances) to develop and submit plans to EPA for approval. Plans do not go into effect until 2022. If a state does not

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submit an acceptable implementation plan, the EPA will implement a federal plan for the state. The final "Carbon Pollution Standards" rule applies to any facility that commenced construction after January 8, 2014, or modification or reconstruction after June 18, 2014, with requirements becoming effective 60 days after the rule is published in the Federal Register. EPA accepted Public Comment on the Federal Plan up until January 21, 2016.

JEA knows that the rule poses significant risk to the JEA generation fleet as it is currently comprised. The extent to which the JEA generation fleet may have to be transformed will not be fully known until the state promulgates and legislatively ratifies its respective State Plan. Additionally, several states and several entities representing energy industry interests have filed complex legal challenges to the CPP, including petitions for the rule to be stayed. On January 21, 2016 the U.S. Court of Appeals for the District of Columbia Circuit refused a motion for a stay, but did approve the petitioners' requests that consideration of the challenges to the CPP be expedited. Oral arguments were heard on September 27, 2016. A ruling is expected sometime in spring of 2017.

On February 9, 2016 the United States Supreme Court in a 5-4 decision blocked implementation of CPP pending a court challenge by 29 states, various corporations and industry groups. The U.S. Court of Appeals for the District of Columbia Circuit is expected to rule on the matter in early 2017, with a possible further review by the Supreme Court thereafter. The outcome of the CPP challenge cannot be predicted at this point. The "stay" does not rule on the plan but, for the time being, pauses the need for state agencies and the regulated industry to begin initial implementation of the rule (including submitting an "Initial Plan" to comply with CPP). The resolution of the legal challenges at the U.S. Court of Appeals for the District of Columbia Circuit and potential subsequent challenges may also change JEA's obligations under the CPP.

Even though the ultimate impact of the rule cannot be determined by JEA at this time, in part due to the uncertainty of the outcome of the CPP challenge, the need to finalize state goals and adopt state plans subject to EPA approval and the uncertainty as to how the Florida and Georgia (with respect to the Scherer 4 and Plant Vogtle along with other purchases and sales) plans would ultimately affect JEA, JEA prepared an estimated allocation of the amount of outstanding debt on each of its solid fuel fired generating units. Based on such estimated allocation, the outstanding aggregate principal amount of Electric System Subordinated Revenue Bonds associated with solid fuel generation, St. Johns River-Power Park System Revenue Bonds, Issue Two, St. Johns River Power Park System Revenue Bonds, Issue Three and Bulk Power Supply System Revenue Bonds was approximately \$1.47 billion as of September 30, 2014. Scheduled maturities will reduce the principal amount outstanding to approximately \$795 million as of October 1, 2020.

On March 28, 2017, President Trump issued an Executive Order calling for EPA to review rules that potentially impact domestic energy resources including the Clean Power Plan under the Clean Air Act Section 111(d) and Section 111(b) new source rules. On the same day, the Department of Justice filed motions in federal court to hold the pending Section 111(d) and Section 111(b) litigation in abeyance pending EPA's review process. On April 3, 2017, EPA officially announced the withdrawal of the proposed CPP rules in order to re-evaluate. EPA may suspend, revise or revoke the rule; it does not indicate how long the review process will take.

The 1990 Amendments also provide for possible further regulation of electric generating unit toxic air emissions pending the results of EPA's evaluation of hazards to public health and available corrective technologies. The nature and extent and impact on JEA's operations of any such further regulation cannot yet be predicted.

The Power Park units are meeting the Phase I NOx and SOx limits. The Power Park is equipped with flue gas desulfurization equipment. Advanced low nitrogen oxide ("ALNB") technology has been

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installed on Unit 1 at a cost of approximately \$4,500,000. Over-fire air NOx reduction technology and ALNB technology were installed on Unit 2 in spring 2004 at a cost of \$7,000,000. This significantly reduced NOx emissions and will assist in meeting the reductions to be required under EPA's Clean Air Interstate Rule ("CAIR"). In addition, SCR equipment was installed in 2009 on Power Park Units 1 & 2 at a cost of \$282,000,000. (See, however, "ELECTRIC UTILITY SYSTEM - ELECTRIC UTILITY FUNCTIONS - Environmental Matters - CAIR (CSAPR)" herein for a discussion of certain recent federal court decisions affecting CAIR.) Scherer Unit 4 is not currently equipped with desulfurization equipment. The NOx emission rate for Scherer Unit 4 while burning western coal is significantly below emission rates currently effective for Phase II limits by EPA. Therefore, JEA expects that Phase II compliance costs associated with NOx emissions resulting from the burning of western coal at Scherer Unit 4 will be minimal, if any. ALNB technology was installed at Scherer Unit 4 in 2002.

In November 1999, EPA initiated enforcement action against certain investor-owned utilities and the Tennessee Valley Authority ("TVA") alleging violations of the "new source review" ("NSR") provision of the Clean Air Act. While JEA has not been named in the litigations, GPC has been cited for NSR violations at Plant Scherer for activities during the late 1970's (prior to the time JEA acquired its interest in Scherer Unit 4). EPA allegations focus on the permitting and construction activities of Scherer Units 3 and 4 and do not involve any operations since JEA's purchase of its interest in Scherer Unit 4 in the early 1990's. The action against GPC was stayed in spring 2001 during the appeal of a similar NSR enforcement action against TVA before the United States Court of Appeals for the Eleventh Circuit (the "Court of Appeals"). In June 2003, the Court of Appeals issued its ruling in the TVA case, dismissing the appeal for reasons unrelated to the issues in the case pending against GPC. In May 2004, the United States Supreme Court denied EPA's petition for review of the TVA case. At this time, no party to the case against GPC has sought to reopen the case, which remains administratively closed in the United States District Court for the Northern District of Georgia. While the ultimate resolution of this matter is uncertain at this time, it is unlikely that an unfavorable ruling in this case would result in any new significant capital expenditure for modifications or additional emissions controls for Scherer Unit 4. This is because the capital program to install emission control equipment required by the Multipollutant Rule (discussed in the following paragraph) was completed in 2012 at Scherer Unit 4. Installation of those controls assured Scherer Unit 4's compliance with the Multipollutant Rule and resulted in Scherer Unit 4 having deployed the best available control technology with respect to environmental rules.

During 2007, the Georgia Environmental Protection Division promulgated several rules impacting fossil-fueled generating plants operating in Georgia, intended to be Georgia's implementation of EPA's CAIR and Clean Air Mercury Rule ("CAMR"). The rules were the CAIR NOx Annual Trading Program, Clean Air Mercury Rule, SO<sub>2</sub> Annual Trading Program, the Clean Air Mercury Annual Trading Program and the Multipollutant Control Rule for Electric Utility Steam Generating Units ("Multipollutant Rule"). The NOx, SO<sub>2</sub> and mercury trading rules provided for firm, state-level emission limits to be met by allocating emission allowances to regulated entities and allowing the entities to trade those allowances. The Multipollutant Rule established dates and timetables for the installation of certain control technologies by the covered generating units, including Scherer Unit 4. The Multipollutant Rule was to also help assure Georgia's progress towards attainment of National Ambient Air Quality Standards ("NAAQS") for ozone and particulate matter and required the installation of sorbent injection and baghouses or a comparable technology at Scherer Unit 4 by 2010. This requirement was met by the installation of SCR technology and fluidized gas desulphurization at Scherer Unit 4 by 2014. The installation of these control technologies has been completed and they are in operation.

In February 2008, the United States Court of Appeals for the District of Columbia Circuit (the "D.C. Circuit Court") vacated CAMR, which had the effect of vacating Georgia's Clean Air Mercury Annual Trading Program. In July 2008, the D.C. Circuit Court vacated CAIR and then in December 2008 remanded CAIR back to EPA for revision without vacatur (*i.e.*, the D.C. Circuit Court rescinded its

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earlier vacation of CAIR, but ordered that CAIR be modified in a manner consistent with the D.C. Circuit Court's July 2008 opinion), which had the effect of allowing CAIR to remain in effect pending such modification. Requirements of the Multipollutant Rule were not impacted by the D.C. Circuit Court's decisions. Additional financial, operational and other impacts of the D.C. Circuit Court's decisions and EPA's subsequent rulemakings pertaining to these issues are uncertain at this time.

## National Ambient Air Quality Standards

National Ambient Air Quality Standard ("NAAQS") are established to protect human health or public welfare. The EPA is required to review the NAAQS every five years and make such revisions in such criteria and standards and promulgate such new standards as may be appropriate in accordance with provisions of the Clean Air Act. If the EPA determines that a state's air quality is not in compliance with a NAAQS, that state is required to establish plans to reduce emissions to demonstrate attainment with that NAAQS.

Specific NAAQS that have recently been revised or are currently proposed for revision are as follows:

Ozone NAAQS. On October 1, 2015, the EPA revised its NAAQS for ground-level ozone to 70 parts per billion ("ppb"), which is more stringent than the 75 ppb standard set in 2008. Under this rule, areas must be designated as either attainment or nonattainment for this new ozone NAAQS on or before October 1, 2017, and states with nonattainment areas will have up to three years following designation to submit a revised state implementation plan ("SIP") outlining strategy and emission control measures to achieve compliance. Duval County is projected to be in attainment of the revised standard. In the event that Duval County was to become a non-attainment area, JEA's power plants (e.g., Northside, the Power Park and Brandy Branch) could be required to comply with additional emission control requirements (e.g., increased usage of ammonia in their SCR/SNCR) for nitrogen oxides and volatile organic compounds which are precursors to ozone formation. The nature and consequences of a non-attainment designation cannot be predicted at this time.

Particulate Matter NAAQS. The EPA finalized the NAAQS Fine Particulate Matter ("PM<sub>2.5</sub>") standards in September 2006. Since then, the EPA established a more stringent 24-hour average PM<sub>2.5</sub> standard and kept the annual average PM<sub>2.5</sub> standard and the 24-hour coarse particulate matter standard unchanged. The EPA issued a final PM<sub>2.5</sub> rule on December 14, 2012, that reduced the annual PM<sub>2.5</sub> standard from 15  $\mu$ g/m³ to 12  $\mu$ g/m³. The rule left the 24-hour PM<sub>2.5</sub> standard of 35  $\mu$ g/m³ unchanged. The change in the PM<sub>2.5</sub> has not resulted in non-attainment designation for Duval County and has not had a material adverse effect on the operations of JEA's generating facilities.

SO<sub>2</sub> and NO<sub>2</sub> NAAQS. During 2010, the EPA finalized new one-hour NAAQS for both SO<sub>2</sub> and nitrogen dioxide ("NO<sub>2</sub>"). In 2013, the EPA published in the Federal Register its proposed nonattainment designations based on monitoring data for the 2010 one hour primary SO<sub>2</sub> NAAQS. Parts of two Florida counties, including Nassau County, which is adjacent to JEA's service territory, were initially designated as being nonattainment areas. Duval County was not designated at this time. On August 10, 2015, EPA issued a final rule directing states to provide data to characterize current air quality in areas with large sources of sulfur dioxide SO<sub>2</sub> emissions to identify maximum 1-hour SO<sub>2</sub> concentrations in ambient air. The air quality data developed by the states in accordance with the final rule will be used by EPA in future rounds of area designations for the 2010 1-hour SO<sub>2</sub> NAAQS. A March 2015 court order requires EPA to complete designations of all areas by the end of 2020. The FDEP conducted dispersion modeling studies of several large SO<sub>2</sub>-emitting sources in the State of Florida (including JEA's NGS and

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SJRPP boilers), and found that the 1-hour SO<sub>2</sub> NAAQS is being met in Duval County using either allowable emission rates or actual emission rates (for the past three years).

In the unlikely event that Duval County is designated as non-attainment, then existing JEA generating facilities within the Duval County may be required to install reasonably achievable control technology to control more stringent emissions limits. Although most of JEA's sources are already equipped with state-of-the-art SO<sub>2</sub> and NO<sub>x</sub> control equipment, operational changes and permit restrictions may be required for sources that do not currently have such restrictions.

State Implementation Plans. The Clean Air Act requires states to develop a general plan to attain and maintain the NAAQS in all areas of the country and a specific plan to attain the standards for each area designated nonattainment for a NAAQS. These plans, known as State Implementation Plans or SIPs, are developed by state and local air quality management agencies and submitted to EPA for approval.

On June 12, 2015, EPA published a final rule concerning how provisions in EPA-approved SIPs treat excess emissions during periods of startup, shutdown or malfunction ("SSM").

The final rule updates EPA's SSM Policy as it applies to SIP provisions and clarifies, restates, and revises EPA's guidance concerning its interpretation of the Clean Air Act requirements with respect to treatment in SIPs of excess emissions that occur during periods of SSM. The EPA issued a "SIP call" for Florida and 35 other states requiring them to submit corrective SIP revisions by November 22, 2016. Florida submitted its SSM SIP revision on November 22, 2016. It is expected that most of existing SSM permit conditions for JEA's sources will not be affected, but a few permit modifications could be required with additional work practice standards during SSM events.

#### **MATS**

On February 16, 2012, the EPA issued a final rule intended to reduce emissions of toxic air pollutants from power plants. The Mercury and Air Toxics Standards ("MATS") Rule is intended to regulate four categories of hazardous air pollutants ("HAPs") emitted by coal- or oil-fired EGUs with a capacity of 25 MW or greater, namely mercury, HAP metals, acid gases and organic HAP.

Affected sources had until April 2015 to be in compliance, subject to a one-year extension. In June 2015, the U.S. Supreme Court determined that EPA's rule did not properly consider costs in developing MATS and directed EPA to address costs. On December 1, 2015, the EPA published a proposed supplemental finding and request for comment regarding the costs of the MATS rule, in response to the Supreme Court's decision. On December 15, 2015, the D.C. Circuit remanded MATS back to the EPA without vacatur, leaving MATS in effect and giving the EPA to opportunity to properly complete its cost consideration. Based on the proposed supplemental findings, the EPA is unlikely to make substantive revisions to the MATS rule and the possibility of continuing challenges in the courts will remain, however, after the supplemental findings are promulgated by the EPA.

Because of the controls already installed at JEA's EGUs, JEA did not need to install any new or additional control equipment in order to comply with the MATS rule, as dependent on fuel type. At the Power Park, MATS compliance is being met by purchasing lower sulfur and lower mercury coal utilizing existing ACQS (need to define) equipment.

JEA is in full compliance with all of the requirements of the MATS rule.

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In April 2015, EPA finalized its rule to regulate the disposal and management of coal combustion residuals ("CCRs"), meaning fly ash, bottom ash, boiler slag and flue gas desulfurization materials, destined for disposal from coal-fired power plants. The new rule became effective on October 19, 2015, and established technical requirements for surface impoundments and landfills. The rule requires protective controls, such as liners and groundwater monitoring, at landfills and surface impoundments that store CCRs. The rule, as adopted by EPA, was to be enforced only by citizen-initiated lawsuits, rather than by EPA. However, on December 16, 2016, the President signed the Water Infrastructure Improvements for the Nation Act (the "WIIN Act"), which contains coal ash provisions that enable states to implement and enforce the requirements of the final CCR rule. The WIIN Act provides for the establishment of state and EPA permit programs for coal combustion residuals (coal ash), flexibility for states to incorporate the EPA final rule for coal combustion residuals or develop other criteria that are at least as protective as the final rule and requires EPA to approve state permit programs within 180 days of a state submitting a program for approval.

The rule applies to CCR management practices at the Power Park and Plant Scherer. The rule does not apply to management of CCRs at Northside Generating Station as long as it continues to burn a fuel mix with less than 50 percent coal. The dry solid waste byproduct area at the Power Park (the first cell of Area B) will be required to be lined commencing with the addition of new cells within Area B, which is not expected for at least the next five years. The currently operating cell within Area B does not have to be lined but must comply with the operating and monitoring requirements of the rule. The Power Park's two closed byproduct storage areas (Areas 1 and 2) are not affected by this rule. The Power Park has no regulated surface impoundments. Existing surface impoundments, like that at Plant Scherer, are required to meet increased and more restrictive technical and operating criteria or to close. GPC has decided to close the surface impoundment at Plant Scherer instead of pursuing a retrofit, and the timeline for closure activities has yet to be determined.

EPA left in place an amendment to the Federal Resource Conservation and Recovery Act known as the Bevill exemption for beneficial uses of CCRs in which CCRs are recycled as components of products instead of being placed in impoundments or landfills. Large quantities of CCRs are used today in concrete, cement, wallboard and other contained or encapsulated applications.

#### Cross-State Air Pollution Rule and Clean Air Interstate Rule

On July 6, 2011 EPA finalized the Cross-State Air Pollution Rule ("CSAPR") to regulate interstate impacts of SO<sub>2</sub> and NO<sub>X</sub>. The final rule replaced the EPA's 2005 Clean Air Interstate Rule ("CAIR"). On April 29, 2014, the U.S. Supreme Court reversed a D.C. Circuit decision and upheld the CSAPR rule. CSAPR requires a total of 28 states, plus the District of Columbia, to reduce annual SO<sub>2</sub> emissions, annual NO<sub>X</sub> emissions and/or ozone season NO<sub>X</sub> emissions to assist in attaining the 1997 ozone and fine particle and 2006 fine particle NAAQS. CSAPR became effective on January 1, 2015 for SO<sub>2</sub> and annual NO<sub>X</sub>, and May 1, 2015 with respect to seasonal NO<sub>X</sub> requirements. The State of Florida currently is subject only to seasonal NO<sub>X</sub> requirements (May 1 through September 30) under CSAPR rule.

On December 3, 2015, EPA proposed an updated rule (known as the "transport rule"), which incorporated the 2008 ozone standard into EPA's cross-state air pollution analysis. The proposal indicates that Florida's emissions do not cause non-compliance with the 2008 ozone standard in any downwind states. The rule was finalized on September 7, 2016, and Florida is no longer subject to CSAPR and has been removed from CSAPR beginning in 2017. Additional modeling will also be conducted with respect to the 2015 ozone standard, and Florida could again be linked to one or more downwind states, resulting in being subject to the CSAPR ozone season program again.

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JEA had begun implementing SCR technology for NOx control at the Power Park to meet the requirements of CAIR before the D.C. Circuit Court ruling vacated CAIR in July 2008. JEA's power plants will be able to comply with any additional NOx emission reduction requirements through increased usage of ammonia in their SCR/SNCR during the ozone season under CSAPR. JEA also has the option of purchasing  $NO_x$  allowance credits in the market in lieu of operating the SCR at the Power Park, which is optional at this time.

See also "ELECTRIC UTILITY SYSTEM - *ELECTRIC UTILITY FUNCTIONS* - St. Johns River Power Park - *Fuel Supply and Transportation*" herein.

#### Regional Haze

The EPA issued final regulations for a Regional Haze Program in June 1999. The purpose of the regulations is to improve visibility in the form of reducing regional haze in 156 national parks and wilderness areas ("Class I areas") across the country. Haze is formed, in part, from emissions of SO<sub>2</sub> and NO<sub>x</sub>. Because these pollutants can be transported over long distances, all 50 states, including those that do not have Class I areas, are required to participate in planning, analysis, and in many cases, emission control programs under the regional haze rule. Northside Unit 3 is subject to Best Available Retrofit Technology requirements under the EPA Regional Haze rules. Northside Unit 3 applied for and received an exemption under the Regional Haze Rule due to this unit's having minimal impacts on visibility in the Class I areas from particulate emissions as demonstrated by ambient air modeling.

#### Water

On May 14, 2014, EPA promulgated a draft rule to set technology standards for cooling water intake systems for existing facilities under Section 316(b) of the Federal Clean Water Act. Section 316(b) requires that standards for the location, design, construction and capacity of cooling water intake systems reflect the best technology available for minimizing adverse environmental impacts. Under the rule, existing facilities that withdraw very large amounts of water are required to conduct studies to help their respective permitting authorities determine whether and what site-specific controls, if any, would be required to reduce the number of aquatic organisms that are captured in cooling water intake systems. The final rule was published in the Federal Register on August 15, 2014 and became effective October 14, 2014. It will likely be the subject of further legal challenges.

The new standards in the final rule do not affect any of its facilities other than Northside. Northside is one of more than 1,260 existing facilities that use large volumes of cooling water from lakes, rivers, estuaries or oceans to cool their plants. It is possible that new standards may prospectively require upgrades to the system, varying from establishment of existing facilities as the Best Technology Available ("BTA"), to improvements to the existing screening facilities to the installation of other cooling technologies. A full two-year study is required to evaluate site specific conditions and form a basis for assessing BTA. JEA is expecting to start these studies in 2018. Accordingly, costs have not been determined for Northside and are not currently included in JEA's capital program for the Electric System.

#### **Effluent Limitation Guidelines**

EPA issued the final Steam Electric Effluent Limitations Guidelines ("ELG") on September 30, 2015, and they became final on January 4, 2016. Under the final rule, new requirements for existing power plants would be phased in between 2018 and 2023. Requirements under the rule are waste-stream specific within a generating facility. JEA has evaluated compliance strategies that are being planned for NGS and SJRPP. The investments to ensure compliance at both plants are not material. Options for compliance at Plant Scherer are being developed by all co-owners and have not been finalized.

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The rule has minimal impact to operations at Northside Generating station: its CFB configuration does not have a Flue Gas Desulfurization (FGD) Unit, and the system's boiler bottoms are already in a dry state. Upgrades at the Power Park are not expected to be materially significant. Boiler bottoms will be retrofitted with dry handling and FGD waste-streams will be managed as a zero discharge option via operational modifications.

#### Other Environmental

On May 27, 2015, EPA and the U.S. Army Corps of Engineers released the prepublication version of the final "Clean Water Rule: Definition of 'Waters of the United States,'" ("WOTUS") redefining the extent of Clean Water Act jurisdiction and which was published in the Federal Register on July 29, 2015. This rule contains many specific exemptions for connecting surface water features that are portions of the City's existing stormwater management system permitted under the National Pollutant Discharge Elimination System ("NPDES") Municipal Separate Stormwater Sewer System ("MS4") Also, the rule specifically exempts JEA's permitted NPDES wastewater and potentially identified NPDES stormwater pond discharges. The rule was stayed nationwide on October 9, 2015 and is the subject of ongoing legal challenges. On February 28, 2017, President Trump signed an Executive Order directing the EPA Administrator and U.S. Army Corps of Engineers Assistant Secretary to review WOTUS. It directs both agencies to review WOTUS for consistency and to interpret the term "navigable waters" in a manner consistent with U.S. Supreme Court Justice Scalia's interpretation, which is much more restrictive and, as appropriate, engage in a notice and comment rulemaking process to propose a rule to rescind or revise the current WOTUS rule. The existing rule will remain stayed until legal challenges are decided or a new/revised rule is promulgated. JEA will evaluate the rule for potential additional wetland mitigation requirements for future infrastructure projects should implementation again become likely.

JEA's electric utility operations are subject to continuing environmental regulation. Federal, state, regional and local standards and procedures which regulate the environmental impact of JEA's system are subject to change. These changes may arise from continuing legislative, regulatory and judicial action regarding such standards and procedures. Consequently, there is no assurance that the units in operation, under construction or contemplated will remain subject to the regulations currently in effect, will always be in compliance with future regulations or will always be able to obtain all required operating permits. An inability to comply with environmental standards could result in increased costs of operating units, reduced operating levels or the complete shutdown of individual electric generating units not in compliance.

JEA cannot predict at this time whether any additional legislation or rules will be enacted which will affect JEA's operations, and if such laws or rules are enacted, what the costs to JEA might be in the future because of such action.

#### **Factors Affecting the Electric Utility Industry**

#### General

The electric utility industry has been, and in the future may be, affected by a number of factors which could have an impact on the financial condition of an electric utility such as the Electric System. These factors likely would affect individual utilities in different ways. Such factors include, among others: (i) effects of compliance with changing environmental, licensing and regulatory requirements, (ii) regulatory changes and changes that might result from a national energy policy, (iii) uncertain access to low cost capital for replacement of aging fixed assets, (iv) increases in operating costs, (v) effects of competition from other suppliers of electricity and (vi) issues relating to the reliability of electric

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transmission systems and grids. These factors, and others, are discussed in more detail below in relation to how they affect JEA.

The future financial condition of the Electric System could be adversely affected by, among other things, legislation, environmental and other regulatory actions promulgated by applicable federal, state and local governmental agencies. Future changes to new and existing regulations may substantially increase the cost of electric service by requiring changes in the design or operation of existing or new facilities. JEA cannot predict future policies such agencies may adopt.

#### **Future Legislation**

From time to time, additional federal or state legislation or regulations affecting the electric utility industry may be enacted. Such legislation can radically change the regulatory context in which JEA operates and can require increased capital or operating expenditures, or reduced operations, at existing and/or new generating facilities. Any such legislative changes are inherently impossible to predict with any certainty, particularly in the way they might apply to specific organizations or facilities, such as JEA. JEA, through its consultants and participation in state and national advocacy groups, maintains awareness of legislative issues that may impact operations, participating in advocacy roles as warranted.

Compliance with GHG emission reduction requirements could require JEA, at significant cost, to purchase allowances or offsets, change the type of boiler fuel JEA uses, retire high-emitting generation facilities and replace them with lower-emitting generation facilities, or implement carbon capture and sequestration technology. The estimation of costs of compliance with GHG legislation or with EPA rules is subject to significant uncertainties because it is based on several interrelated assumptions and variables, including timing of the implementation of rules, required levels of reductions, allocation requirements, the maturation and commercialization of carbon capture and sequestration technology and associated regulations, and JEA's selected compliance alternatives.

Recent examples of proposals by the Florida Legislature included bills (House Bill 639 and Senate Bill 838) related to the Clean Power Plan, which would have limited the FDEP's Clean Power Plan related activity until (1) the U.S. Congress enacts legislation regulating CO<sub>2</sub> emissions from existing stationary sources; or (2) a federal court issues a final judgment upholding the legality of regulations addressing CO<sub>2</sub> emissions from existing stationary sources. These bills did not pass in the 2016 legislative session but similar bills may return. The Florida Legislature will need to approve any State Plan when the current Clean Power Plan stay by the Supreme Court of the U.S. is lifted or when the federal courts reach an outcome that restarts the plan development timeline.

In addition, there have been two solar-related ballot initiatives seeking to amend the Florida Constitution to expand solar generation in Florida. The first amendment, "Floridians for Solar Choice," failed to collect the required number of petition signatures to be placed on the November 2016 ballot. The second amendment, "Consumers for Smart Solar," garnered sufficient signatures to be placed on the November ballot but was not approved by the electorate. It is uncertain at this time as to whether supporters of either ballot initiative will pursue the initiatives again.

Any new state or federal legislation or changes to existing legislation or regulations could affect JEA's operations. JEA cannot predict whether any additional legislation or regulations will be enacted which will affect JEA's operations and if such laws are enacted, what the costs to JEA might be in the future.

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#### FINANCIAL INFORMATION RELATING TO ELECTRIC UTILITY FUNCTIONS

#### **Debt Relating to Electric Utility Functions**

#### Electric System Bonds

As of September 30, 2016, \$1,208,460,000 in aggregate principal amount of bonds issued pursuant to the Electric System Resolution (the "Electric System Bonds") was outstanding. As of the date of this Annual Disclosure Report, there is \$1,137,820,000 in aggregate principal amount of Electric System Bonds outstanding under the Electric System Resolution, consisting of (a) \$465,250,000 in aggregate principal amount of variable rate Electric System Bonds and (b) \$672,570,000 in aggregate principal amount of fixed rate Electric System Bonds.

Electric System Bonds may be issued to finance any lawful purpose of JEA relating to the Electric System (other than for the purpose of financing the generating facilities of the Electric System). See "SUMMARY OF CERTAIN PROVISIONS OF THE ELECTRIC SYSTEM RESOLUTION - Issuance of Additional Electric System Bonds" in APPENDIX B attached hereto.

From time to time, JEA requests Council approval of the issuance of Electric System Bonds and Subordinated Electric System Bonds. Pursuant to previous Council approvals, JEA currently is authorized to issue additional Electric System Bonds and/or Subordinated Electric System Bonds for the purpose of financing the costs of additions, extensions and improvements to the Electric System in such principal amount as shall provide JEA with "net proceeds" (defined as principal amount, less original issue discount, less underwriters' discount, less costs of issuance) of approximately \$465,160,992. JEA expects that such current authorization will be adequate to enable JEA to maintain its Electric System capital improvement program as projected through the Fiscal Year ending September 30, 2021. See "ELECTRIC UTILITY SYSTEM - ELECTRIC UTILITY FUNCTIONS - Electric System - Capital Program" herein.

JEA also has received approvals from the Council for the issuance of Electric System Bonds and/or Subordinated Electric System Bonds for the purpose of refunding outstanding Electric System Bonds and Subordinated Electric System Bonds. JEA may issue additional Electric System Bonds or Subordinated Electric System Bonds to refund outstanding Electric System Bonds and/or Subordinated Electric System Bonds from time to time as it deems economical or advantageous.

In the future, JEA will continue to seek authorization as needed from the Council to issue additional Electric System Bonds and/or Subordinated Electric System Bonds in order to enable it to finance its Electric System capital program.

A summary of certain provisions of the Electric System Resolution, including a description of the proposed amendments thereto described below, is attached to this Annual Disclosure Report as APPENDIX B.

Liquidity support in connection with tenders for purchase of JEA's Variable Rate Electric System Revenue Bonds, Series Three 2008A, Series Three 2008B-2, Series Three 2008B-3, Series Three 2008C-1, Series Three 2008C-2 and Series Three 2008C-3 (collectively, the "Senior Liquidity Supported Electric System Bonds") currently is provided by certain banks pursuant to standby bond purchase agreements between JEA and each such bank. Any Senior Liquidity Supported Electric Bond that is purchased by the applicable bank pursuant to its standby bond purchase agreement between JEA and such bank and is not remarketed is required to be repaid as to principal in equal semiannual installments over a period of approximately five years from the date so purchased. In addition, any Senior Liquidity Supported Electric Bond that is purchased by the applicable bank pursuant to its standby bond purchase agreement may be tendered or deemed tendered to JEA for payment upon the occurrence of certain

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"events of default" on the part of JEA under such standby bond purchase agreement. Upon any such tender or deemed tender for purchase, the Senior Liquidity Supported Electric Bond so tendered or deemed tendered will be due and payable immediately. For a discussion of certain "ratings triggers" contained in such standby bond purchase agreements giving rise to such an event of default, see "OTHER FINANCIAL INFORMATION - Effect of JEA Credit Rating Changes" herein. As of the date of this Annual Disclosure Report, no Senior Liquidity Supported Electric Bonds are held by the banks providing such standby bond purchase agreements. The standby bond purchase agreements are subject to periodic renewal at the discretion of the respective bank. The current expiration dates for the standby bond purchase agreements range from May 10, 2017 to June 25, 2018.2018 to May 8, 2020.

On July 27, 2010, the bank previously providing liquidity support for JEA Variable Rate Electric System Revenue Bonds, Series Three 2008B-1 and Series Three 2008D-1 and on October 22, 2012, the bank previously providing credit and liquidity support for JEA's Variable Rate Electric System Revenue Bonds, Series Three 2008B-4 (such Series Three 2008B-1, 2008D-1 and 2008B-4 Bonds are referred to herein collectively as the "Bank Purchased Bonds") purchased the applicable Bank Purchased Bonds pursuant to three substantially similar direct purchase agreements. The Bank Purchased Bonds are, as of the date of this Annual Disclosure Report, outstanding in the principal amounts of \$60,395,000, \$111,420,000 and \$49,810,000, respectively. Upon such purchases, the letter of credit and standby bond purchase agreement previously in effect for the respective Bank Purchased Bonds terminated. Except as described below, the bank does not have the option to tender the respective Bank Purchased Bonds for purchase for a period specified in the respective direct purchase agreements, which period would be subject to renewal under certain conditions. The three direct purchase agreements were amended effective September 17, 2015, and the current expiration date of each is September 17, 2018. At the end of the period specified, which period is subject to extension under certain conditions, the Bank Purchased Bonds are subject to mandatory tender for purchase. Any Bank Purchased Bond that is not remarketed and purchased from such bank on the mandatory tender date that occurred upon the expiration of such period would be required to be repaid as to principal in equal semiannual installments over a period of approximately five years from such mandatory tender date. Such bank has no option to tender the Bank Purchased Bonds for payment by JEA during the holding period except upon the occurrence of certain "events of default" on the part of JEA under the respective direct purchase agreements and the occurrence of certain other conditions. Upon any such tender for payment, the Bank Purchased Bond so tendered would be due and payable immediately.

#### Proposed Amendments to the Electric System Resolution

In May 1998, JEA adopted a resolution (as amended, the "May 1998 Amending Resolution") for the purpose of making certain material amendments to the Electric System Resolution. In addition to certain amendments to the Electric System Resolution that heretofore have become effective, the May 1998 Amending Resolution provides for the amendment of certain provisions of the Electric System Resolution relating to the priority of payments from the Electric System with respect to the Power Park (the "Power Park Amendment"), in a manner requiring (i) the consent of FPL, (ii) the consent of the holders of 60 percent or more in principal amount of the Power Park Issue Two Bonds outstanding and (iii) the consent of the holders of a majority in principal amount of the Power Park Issue Three Bonds outstanding. As of the date of this Annual Disclosure Report, JEA has not solicited any consents to the Power Park Amendment and has no intention of soliciting any such consents in the future.

If the Power Park Amendment ever were to become effective, it would amend the provisions of the Electric System Resolution relating to the priority of payments with respect to the Power Park to provide that payments with respect to (i) debt service on obligations issued by JEA with respect to the Power Park (including the Power Park Issue Two Bonds and the Power Park Issue Three Bonds) and any additional amounts relating to "debt service coverage" with respect thereto and (ii) deposits into any renewal and replacement or similar fund with respect to the Power Park will no longer constitute a

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portion of the Cost of Operation and Maintenance (as defined in the Electric System Resolution), but will be payable on a parity with Subordinated Bonds (as defined in the Electric System Resolution) that may be issued in accordance with the provisions of the Electric System Resolution, including the Subordinated Electric System Bonds.

The amendments to the Electric System Resolution contained in the May 1998 Amending Resolution also would have amended the provisions of the Electric System Resolution relating to the priority of payments with respect to the Scherer 4 Project (and any other project that may be financed under the Restated and Amended Bulk Power Supply System Resolution) in a manner similar to that described above with respect to the Power Park, but the amendments relating to the Scherer 4 Project (and any other project that may be financed under the Restated and Amended Bulk Power Supply System Resolution) were rescinded by JEA in conjunction with the adoption of the Restated and Amended Bulk Power Supply System Resolution.

#### Subordinated Electric System Bonds

On August 16, 1988, JEA adopted a resolution (as amended, restated and supplemented, the "Subordinated Electric System Resolution") authorizing the issuance of obligations of JEA (the "Subordinated Electric System Bonds") that are junior and subordinate in all respects to the Electric System Bonds as to lien on, and source and security for payment from, the revenues of the Electric System. As of September 30, 2016, \$1,151,025,000 in aggregate principal amount of Subordinated Electric System Bonds was outstanding. As of the date of this Annual Disclosure Report, there is \$1,062,665,000 in aggregate principal amount of Subordinated Electric System Bonds outstanding under the Subordinated Electric System Resolution, consisting of (a) \$132,420,000 in aggregate principal amount of variable rate Subordinated Electric System Bonds and (b) \$930,245,000 in aggregate principal amount of fixed rate Subordinated Electric System Bonds.

The Subordinated Electric System Bonds may be issued for the purpose of financing the cost of acquisition and construction of additions, extensions and improvements to the Electric System, or any other lawful purpose of JEA relating to the Electric System, or to refund any of the Electric System Bonds or the Subordinated Electric System Bonds.

Pursuant to the Subordinated Electric System Resolution and the laws of the State of Florida, and in accordance with the Electric System Resolution, the amount of Subordinated Electric System Bonds that may be issued by JEA is not limited and is subject only to approval by the Council and satisfaction of the conditions set forth in the Subordinated Electric System Resolution. For a discussion of the Council authorization currently in effect for the issuance of Electric System Bonds and/or Subordinated Electric System Bonds, see subsection "Electric System Bonds" above in this section.

A summary of certain provisions of the Subordinated Electric System Resolution, including a description of the proposed amendments thereto described below, is attached to this Annual Disclosure Report as APPENDIX C. See "SUMMARY OF CERTAIN PROVISIONS OF THE SUBORDINATED ELECTRIC SYSTEM RESOLUTION - Additional Subordinated Bonds; Conditions to Issuance" in APPENDIX C attached hereto.

Liquidity support in connection with tenders for purchase of the Variable Rate Electric System Subordinated Revenue Bonds, 2000 Series A, 2000 Series F-1, 2000 Series F-2 and 2008 Series D (collectively, the "Subordinated Liquidity Supported Electric System Bonds") currently is provided by certain banks pursuant to standby bond purchase agreements between JEA and each such bank. Any Subordinated Liquidity Supported Electric Bond that is purchased by the applicable bank pursuant to its standby bond purchase agreement between JEA and such bank and is not remarketed is required to be repaid as to principal in equal semiannual installments over a period of approximately five years from the

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date so purchased. In addition, any Subordinated Liquidity Supported Electric Bond that is purchased by the applicable bank pursuant to its standby bond purchase agreement will constitute an "Option Subordinated Bond" within the meaning of the Subordinated Electric System Resolution and, as such, may be tendered or deemed tendered to JEA for payment upon the occurrence of certain "events of default" on the part of JEA under such standby bond purchase agreement. Upon any such tender or deemed tender for purchase, the Subordinated Liquidity Supported Electric Bond so tendered or deemed tendered will be due and payable immediately. For a discussion of certain "ratings triggers" contained in such standby bond purchase agreements giving rise to such an event of default, see "OTHER FINANCIAL INFORMATION - Effect of JEA Credit Rating Changes" herein. As of the date of this Annual Disclosure Report, no Subordinated Liquidity Supported Electric Bonds are held by the banks providing such standby bond purchase agreements. Such standby bond purchase agreements are subject to periodic renewal. The current expiration dates of the standby bond purchase agreements range from November 15, 2017 to June 25, 2018.

#### Power Park Issue Two Bonds

As of September 30, 2016, \$210,085,000 in aggregate principal amount of bonds (the "Power Park Issue Two Bonds") issued pursuant to a resolution adopted by JEA on March 30, 1982 entitled "St. Johns River Power Park System Revenue Bond Resolution" (as amended and supplemented, the "First Power Park Resolution") were outstanding. As of the date of this Annual Disclosure Report, \$167,935,000 of Power Park Issue Two Bonds is outstanding under the First Power Park Resolution.

The First Power Park Resolution provides for the issuance of additional bonds (a) to finance the completion of construction of the initial facilities of the Power Park, (b) to finance the Cost of Acquisition and Construction of any Additional Facilities (as such terms are defined in the First Power Park Resolution) of the Power Park and (c) to refund Power Park Issue Two Bonds. See "SUMMARY OF CERTAIN PROVISIONS OF THE FIRST POWER PARK RESOLUTION - Additional Power Park Bonds" in APPENDIX D attached hereto. JEA does not anticipate that additional Power Park Issue Two Bonds will be required to provide additional funds for JEA's interest in the initial facilities of the Power Park. JEA does not intend to issue additional bonds under the First Power Park Resolution other than the Power Park Issue Two Bonds. JEA may issue additional Power Park Issue Two Bonds to refund outstanding Power Park Issue Two Bonds from time to time as it deems economical or advantageous and/or to finance the Power Park capital program.

The First Power Park Resolution requires that JEA allocate to the Electric System a portion of the output and capacity of its ownership interest in the Power Park and that JEA make payments from the Electric System therefor on a "take-or-pay" basis. Pursuant to the Electric System Resolution, JEA's obligation to make payments from the Electric System with respect to the Power Park, including its share of debt service on the Power Park Issue Two Bonds, is a Contract Debt payable as a Cost of Operation and Maintenance of the Electric System. Such payments are payable from the revenues of the Electric System prior to any payments from such revenues for indebtedness not constituting Contract Debts issued for the Electric System, including the Electric System Bonds and the Subordinated Electric System Bonds. See the subsection "Electric System Contract Debts" below in this section.

Pursuant to the Power Park Joint Ownership Agreement, JEA and FPL have entered into the FPL-Power Park Sale, pursuant to which JEA has agreed to sell, and FPL has agreed to purchase, on a "take-or-pay" basis, 37.5 percent of JEA's 80 percent share of the generating capacity of the Power Park and related energy until the Power Park Joint Ownership Agreement expires in 2022, subject to the limitation that FPL's right to receive such capacity and related energy shall be suspended if and when the receipt by FPL of any additional amount of energy from such sale would result in FPL having received energy from such sale in excess of 25 percent of the product of (a) the nameplate capacity of JEA's 80 percent ownership interest in the Power Park, without any reduction for reserves or other unutilized

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capacity, and (b) the number of years (including fractions) from the date FPL first took energy pursuant to such sale until the latest maturity date of the bonds issued pursuant to the First Power Park Resolution. Whether or when such suspension may occur depends upon the manner in which FPL schedules the capacity and related energy being sold to it pursuant to the FPL-Power Park Sale over the remaining term of such sale.

Pursuant to the Power Park Joint Ownership Agreement, both JEA and FPL must make payments for the output, capacity, use and services of JEA's interest in the Power Park which payments are due on such dates and in such aggregate amounts as shall be sufficient to provide Revenues (as defined in the First Power Park Resolution) in each year sufficient to allow JEA to pay or provide for the payment of all amounts payable out of such Revenues, including debt service on the bonds issued pursuant to the First Power Park Resolution; *provided, however*, that during any suspension of FPL's right to receive the capacity and related energy being sold to it pursuant to the FPL-Power Park Sale, as described in the preceding paragraph, FPL shall be obligated only to pay its share of the debt service on the bonds issued pursuant to the First Power Park Resolution and the administrative fees and expenses incurred under the First Power Park Resolution.

As of September 30, 2016, 85.63 percent of the term of the FPL-Power Park Sale had passed. JEA has computed that FPL has received, as of September 30, 2016, 93.59 percent of the capacity and related energy to which it is entitled over the entire term of such sale.

JEA can make no predictions as to the manner in which FPL will schedule its right to receive the capacity and related energy being sold to it pursuant to the FPL-Power Park Sale over the remaining term of the FPL-Power Park Sale. In the event that FPL continues to schedule such capacity and energy in the same manner as it has through September 30, 2016, FPL's right to receive such capacity and energy would be suspended on a date that is earlier than the date on which the term of the FPL-Power Park Sale expires, with the effect that FPL no longer would be entitled to receive such capacity and energy but still would remain obligated to pay its share of the debt service on the bonds issued pursuant to the First Power Park Resolution and the administrative fees and expenses incurred under the First Power Park Resolution.

The respective obligations of FPL and of JEA with respect to the Power Park are several and not joint. Thus, JEA's ability to provide for the operation of its interest in the Power Park is dependent upon the financial ability of JEA and FPL to provide the necessary funds to pay the costs thereof. Accordingly, JEA's ability to collect revenues sufficient to enable it to cause all of the obligations with respect to the Power Park, including debt service on the bonds issued pursuant to the First Power Park Resolution, to be paid is dependent, in part, on the ability of FPL to make the payments due under its "take-or-pay" contract for the purchase of part of the generating capacity of JEA's interest in the Power Park. JEA cannot give any assurance as to the ability of FPL to abide by its obligation under its "take-or-pay" contract for the purchase of part of the generating capacity of JEA's interest in the Power Park. However, JEA currently has no knowledge of any facts or events that would cause FPL to be unable, or to fail, to comply with its obligations under the Power Park Joint Ownership Agreement.

Payments required to be made by FPL according to the Power Park Joint Ownership Agreement are not subject to any increase to make up for any deficiency in the payments made by JEA from the Electric System into the Revenue Fund established under the First Power Park Resolution. In the event of any failure by FPL to make when due any payment required by the Power Park Joint Ownership Agreement, JEA shall make available to the Electric System the energy and capacity of the Power Park which FPL was entitled to receive prior to its default, and JEA shall use its best efforts to sell to other utilities such Power Park output previously available to FPL and not taken for the account of the Electric System. Payments required to be made by JEA from the Electric System are not subject to any increase to make up for any deficiency in the payments to be made by FPL, except to the extent that the Electric

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System shall be able to use and shall take a portion of the energy and capacity of the Power Park which FPL was entitled to receive prior to its failure to make any payment.

In the event of a default by either JEA or FPL in any of their obligations under the Power Park Joint Ownership Agreement, the defaulting party has no right to take any of the capacity and associated energy of the Power Park. The non-defaulting party may take all of the Power Park's capacity and associated energy to which the defaulting party would otherwise be entitled; such a taking by the non-defaulting party will not relieve the defaulting party of its liability for such default, except in minor part as described in the Power Park Joint Ownership Agreement. If either JEA or FPL remains in default for a period of 365 days, the non-defaulting party has, among other rights, the right to purchase in full or in part the defaulting party's ownership interest in the Power Park at a price determined according to the Power Park Joint Ownership Agreement.

A summary of certain provisions of the First Power Park Resolution is attached to this Annual Disclosure Report as APPENDIX D. In addition, a summary of certain provisions of the Power Park Joint Ownership Agreement is attached to this Annual Disclosure Report as APPENDIX G.

All Outstanding Power Park Issue Two Bonds are expected to be defeased in early 2018 if JEA and FPL execute and deliver mutually satisfactory definitive agreements and receive final approval from JEA's Board, FPL's governing body and regulatory agencies for the early termination of the Power Park Joint Ownership Agreement and cessation of commercial operations of the Power Park in January 2018. See "ELECTRIC UTILITY SYSTEM – ELECTRIC UTILITY FUNCTIONS – St. John's River Power Park – Early Termination of Power Park Joint Ownership Agreement" for additional information.

#### Power Park Issue Three Bonds

On February 20, 2007, the JEA Board adopted a resolution entitled "St. Johns River Power Park System Second Revenue Bond Resolution" (as supplemented, the "Second Power Park Resolution"). Bonds issued under the Second Power Park Resolution are referred to herein as the "Power Park Issue Three Bonds." As of September 30, 2016, \$283,915,000 of Power Park Issue Three Bonds was outstanding under the Second Power Park Resolution. As of the date of this Annual Disclosure Report, \$282,280,000 in aggregate principal amount of Power Park Issue Three Bonds is outstanding under the Second Power Park Resolution.

The Second Power Park Resolution provides for the issuance of Power Park Issue Three Bonds in order to pay the costs of JEA's ownership interest in certain additional facilities of the Power Park. See the subsection "Power Park Issue Two Bonds" above in this section for a discussion of JEA's interest in the Power Park and certain obligations of FPL by reason of FPL's ownership interest in the Power Park. Pursuant to the Electric System Resolution, JEA's obligation to make debt service payments on the Power Park Issue Three Bonds is a Contract Debt payable as a Cost of Operation and Maintenance of the Electric System. Such payments are payable from the revenues of the Electric System prior to any payments from such revenues for indebtedness not constituting Contract Debts issued for the Electric System, including the Electric System Bonds and the Subordinated Electric System Bonds. See the subsection "Electric System Contract Debts" below in this section. FPL has no obligation for debt service in respect of the Power Park Issue Three Bonds.

A summary of certain provisions of the Second Power Park Resolution, including a description of the amendments thereto described below, is attached to this Annual Disclosure Report as APPENDIX E.

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#### **Bulk Power Supply System Bonds**

JEA financed the acquisition of a portion of its ownership in the Scherer 4 Project through the issuance of its bonds (the "Original Bulk Power Supply System Bonds") issued pursuant to a resolution of JEA adopted on February 5, 1991, as amended and supplemented (the "Original Bulk Power Supply System Resolution"). Pursuant to the Original Bulk Power Supply System Resolution, the Electric System was entitled to the entire capacity of the Scherer 4 Project and was required to pay for such capacity on a "take-or-pay" basis. During its Fiscal Year ended September 30, 1999, JEA caused all the remaining Original Bulk Power Supply System Bonds to be retired in advance of the scheduled due dates from certain available funds of the Electric System accumulated for that purpose. As a result, all of the covenants, agreements and other obligations of JEA under the Original Bulk Power Supply System Resolution were discharged and satisfied. However, JEA continued to make the output of the Scherer 4 Project available to the Electric System, and all costs of operating and maintaining the Scherer 4 Project continued to be paid as a Contract Debt of the Electric System, payable as part of the Electric System's Cost of Operation and Maintenance. See subsection "Electric System Contract Debts" below in this section.

On September 18, 2007, the JEA Board adopted a resolution that readopted, amended and restated the Original Bulk Power Supply System Resolution (the Original Bulk Power Supply System Resolution, as so readopted, amended and restated, is referred to herein as the "Restated and Amended Bulk Power Supply System Resolution"). The Restated and Amended Bulk Power Supply System Resolution permits JEA to issue one or more series of bonds thereunder ("Additional Bulk Power Supply System Bonds") for any lawful purpose of JEA related to the Scherer 4 Project (and any other projects that may be financed thereunder). The Restated and Amended Bulk Power Supply System Resolution also permits JEA to issue refunding Additional Bulk Power Supply System Bonds to refund any outstanding Additional Bulk Power Supply System Bonds from time to time as it deems economical or advantageous. As of September 30, 2016, \$111,970,000 in aggregate principal amount of bonds was outstanding under the Restated and Amended Bulk Power Supply System Resolution. As of the date of this Annual Disclosure Report, \$\\$\frac{105,925,000}{105,925,000}\$ in aggregate principal amount of bonds is outstanding under the Restated and Amended Bulk Power Supply System Resolution. See "OTHER FINANCIAL INFORMATION - Revolving Credit Facilities" herein. JEA intends to issue Additional Bulk Power Supply System Bonds to finance its costs of capital improvements to the Scherer 4 Project. See "ELECTRIC UTILITY SYSTEM - ELECTRIC UTILITY FUNCTIONS - Scherer 4 - Capital Program" herein.

A summary of certain provisions of the Restated and Amended Bulk Power Supply System Resolution is attached to this Annual Disclosure Report as APPENDIX F.

#### Electric System Contract Debts

Contract Debts, a component of the Electric System's Cost of Operation and Maintenance, is defined by the Electric System Resolution to mean any obligations of JEA under any contract, lease, installment sale agreement, bulk electric purchase power agreement or otherwise to make payments out of the revenues of the Electric System for property, services or commodities whether or not the same are made available, furnished or received, but shall not include (a) payments required to be made in respect of (i) debt service on any obligations incurred by JEA in connection with the financing of any separate bulk power supply utility or system undertaken by JEA and any additional amounts relating to "debt service coverage" with respect thereto and (ii) deposits into any renewal and replacement or other similar fund or account established with respect to any such separate bulk power supply utility or system (in each such case, other than the Power Park and the Bulk Power Supply System Projects (as defined in the Electric System Resolution and which includes additional electric generating plants)) and (b) payments required to be made in respect of any other arrangement(s) for the supply of power and/or energy to the

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Electric System for resale entered into after February 29, 2000 as may be determined by JEA to be payable on a parity with the payment of Subordinated Bonds (as defined in the Electric System Resolution), including the Subordinated Electric System Bonds. See "SUMMARY OF CERTAIN PROVISIONS OF THE ELECTRIC SYSTEM RESOLUTION" in APPENDIX B attached hereto. For a discussion of certain proposed amendments to the Electric System Resolution that amend the provisions thereof with respect to the priority of payment of JEA's obligations with respect to the Power Park, see subsection "Proposed Amendments to the Electric System Resolution" above in this section and therein the caption "May 1998 Amending Resolution" and "SUMMARY OF CERTAIN PROVISIONS OF THE ELECTRIC SYSTEM RESOLUTION - Proposed Amendments to the Electric System Resolution - May 1998 Amending Resolution" in APPENDIX B attached hereto.

JEA's obligation to make payments from the Electric System to provide revenues to pay JEA's portion of the Power Park operating and maintenance expenses, debt service on the Power Park Issue Two Bonds and renewal and replacement costs relating to the Power Park and all other costs associated with the Power Park, as well as all debt service on the Power Park Issue Three Bonds, is a Contract Debt payable as a Cost of Operation and Maintenance of the Electric System pursuant to the Electric System Resolution. The Contract Debt payments with respect to the Power Park will be a Cost of Operation and Maintenance of the Electric System whether or not the Power Park is operating or operable.

Pursuant to the Restated and Amended Bulk Power Supply System Resolution, JEA is obligated to make the output and capacity of the Scherer 4 Project (and any other projects that may be financed under the Restated and Amended Bulk Power Supply System Resolution) available to the Electric System and is obligated to make payments from the Electric System on a "take-or-pay" basis to provide revenues to pay operating and maintenance expenses of the Scherer 4 Project (and such other projects), debt service on the Additional Bulk Power Supply System Bonds, renewal and replacement costs relating to the Scherer 4 Project (and such other projects) and all other costs relating to the Scherer 4 Project (and such other projects), and such payments constitute a Contract Debt of the Electric System, payable as a Cost of Operation and Maintenance of the Electric System.

See also "ELECTRIC UTILITY SYSTEM - *ELECTRIC UTILITY FUNCTIONS* - Electric System - *Purchase Power Contracts*" herein for a description of JEA's obligations pursuant to certain purchase power contracts, which obligations also constitute Contract Debts payable as a Cost of Operation and Maintenance of the Electric System pursuant to the Electric System Resolution.

JEA is authorized under the Electric System Resolution to construct or acquire and own and/or operate other electric generating utilities or systems for the purpose of furnishing and supplying electric energy and to issue debt obligations to finance the costs of any such separate electric generating utilities or systems, which obligations shall be payable on a parity with the payment of Subordinated Bonds (as defined in the Electric System Resolution), including the Subordinated Electric System Bonds. None of the revenues derived by JEA from the operation of the Power Park under the First Power Park Resolution or the Second Power Park Resolution, from the operation of the Scherer 4 Project under the Restated and Amended Bulk Power Supply System Resolution (and any other projects that may be financed thereunder), or from the operation of any other separate bulk power supply utility or system undertaken by JEA shall be deemed under the First Power Park Resolution, the Second Power Park Resolution, the Restated and Amended Bulk Power Supply System Resolution or the Electric System Resolution to be revenues of the Electric System. For a discussion of certain proposed amendments to the Electric System Resolution that amend the provisions thereof with respect to the priority of payment of JEA's obligations with respect to the Power Park, see subsection "Proposed Amendments to the Electric System Resolution - May 1998 Amending Resolution" above in this section and "SUMMARY OF CERTAIN PROVISIONS OF THE ELECTRIC SYSTEM RESOLUTION - Proposed Amendments to the Electric System Resolution – May 1998 Amending Resolution" in APPENDIX B attached hereto.

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#### **Schedules of Debt Service Coverage**

The following table shows the Electric System Schedules of Debt Service Coverage for the years ended September 30, 2016 and September 30, 2015, respectively. Such Schedules of Debt Service Coverage were derived from supplemental information included with JEA's 2016 Financial Statements and certain other information available to JEA. Such Schedules of Debt Service Coverage should be read in conjunction with such financial statements and the notes thereto. Set forth in APPENDIX A to this Annual Disclosure Report are Schedules of Debt Service Coverage for JEA's interest in the Power Park and the Bulk Power Supply System for the years ended September 30, 2016 and September 30, 2015.

In accordance with the requirements of the Electric System Resolution, all the Contract Debt payments from the Electric System to the Power Park and the Bulk Power Supply System with respect to the use by the Electric System of the capacity and output of JEA's interest in the Power Park and the Bulk Power Supply System are reflected as a purchased power expense on the Electric System Schedules of Debt Service Coverage. The Electric System Schedules of Debt Service Coverage do not include revenues of the Power Park or the Bulk Power Supply System, except that the purchased power expense described in the preceding sentence is net of interest income on funds maintained under the First Power Park Resolution, the Second Power Park Resolution and the Restated and Amended Bulk Power Supply System Resolution. In addition, the Electric System Schedules of Debt Service Coverage do not include revenues received by JEA pursuant to the FPL-Power Park Sale.

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## JEA Electric System Schedules of Debt Service Coverage (In Thousands)

Fiscal Year ended September 30,

	Septer	mber 30,
	2016	2015
Revenues:		
Electric	\$	¢ 1 200 044
Electric	1,240,324	\$ 1,290,044
Investment income <sup>(1)</sup>	3,675	4,322
Earnings from The Energy Authority	6,136	1,461
Other, net <sup>(2)</sup>	26,777	29,055
Less: amount paid from the Revenue Fund into the Rate Stabilization Fund	(99,758)	(135,074)
Plus: amount paid from the Rate Stabilization Fund into the Revenue Fund	66,812	57,680
Total revenues	1,243,966	1,247,488
Operating expenses <sup>(3)</sup>		
Fuel	246,737	264,367
Purchase power <sup>(4)</sup>		269,014
Other operation and maintenance	189,794	191,018
Utility taxes and franchise fees.		61,485
Total operating expenses	747,874	785,884
	\$	Φ 461 604
Net revenues.	496,092	\$ 461,604
Debt service on Electric System Bonds	\$	\$ 82,704
•	79,428	· · · · · · · · · · · · · · · · · · ·
Less: investment income on sinking fund	(2,603)	(1,632)
Less: Build America Bonds subsidy	(1,517)	(1,509)
Debt service requirement on Electric System Bonds	75,308	\$ 79,563
Debt service coverage on Electric System Bonds <sup>(5)</sup>		5.80x
best service coverage on Electric System Bolids	\$	
Net revenues (from above)	496,092	\$ 461,604
Debt service requirement on Electric System Bonds (from above)	75,308	79,563
Plus: aggregate subordinated debt service on Subordinated	, 0,500	77,505
Electric System Bonds	98,419	98,302
Less: Build America Bonds subsidy	,	(2,086)
Debt service requirement on Subordinated Electric System Bonds	96,335	96,216
Debt service requirement on Electric System Bonds and	\$	
Subordinated Electric System Bonds	*	\$ 175,779
Debt service coverage on Electric System Bonds and Subordinated Electric System Bonds <sup>(6)</sup>	2.89x	2.63x

<sup>(1)</sup> Excludes investment income on sinking funds.

<sup>(2)</sup> Excludes the Build America Bonds subsidy.

<sup>(3)</sup> Excludes depreciation and recognition of deferred costs and revenues, net.

<sup>(4)</sup> In accordance with the requirements of the Electric System Resolution, all the contract debt payments from the Electric System to the Power Park and Bulk Power Supply System with respect to the use by the Electric System of the capacity and output of the Power Park and Bulk Power Supply System are reflected as a purchased power expense on these schedules. These schedules do not include revenues of the Power Park and Bulk Power Supply System, except that the purchased power expense is net of interest income on funds maintained under the Power Park and Bulk Power Supply System resolutions.

<sup>(5)</sup> Net revenues divided by debt service requirement. Minimum annual coverage 1.20x.

<sup>(6)</sup> Net revenues divided by total debt service requirement and aggregate subordinated debt service. Minimum annual coverage is 1.15x.

#### Management's Discussion of Operations - JEA

#### Electric System Schedules of Debt Service Coverage

**Revenues.** Effective for the Fiscal Year ended September 30, 2015, the JEA Board adopted and JEA implemented a pricing policy that established cost-based rates for both the Electric and Water and Sewer Systems. The rate policy as adopted included various surcharges and stabilization funds that meet the requirements for deferral under GASB 62.

Total revenues decreased \$3.5 million, or 0.3 percent, for the Fiscal Year ended September 30, 2016 as compared to the Fiscal Year ended September 30, 2015, primarily related to lower fuel revenues as a result of a reduction in the fuel rate that was approved by the JEA Board at its January 2016 meeting to be effective on February 1, 2016 offset, in part, by a decrease in the amount paid from the Revenue Fund into the Rate Stabilization Fund.

Total MWh sales increased 1.7 percent for the Fiscal Year ended September 30, 2016 as compared to the Fiscal Year ended September 30, 2015, to 12,730,288 MWh from 12,517,575 MWh, primarily related to residential and commercial sales increasing 2.3 percent to 9,414,230 MWh for the Fiscal Year ended September 30, 2016 from 9,203,290 MWh for the Fiscal Year ended September 30, 2015.

<u>Operating Expenses</u>. Total operating expenses decreased \$38.0 million, or 4.8 percent, for the Fiscal Year ended September 30, 2016 as compared to the Fiscal Year ended September 30, 2015. Total fuel and purchased power expenses decreased \$34.9 million, or 6.6 percent, for the Fiscal Year ended September 30, 2016 as compared to the Fiscal Year ended September 30, 2015, primarily related to a decrease in cost per MWh from lower solid fuel and natural gas prices offset, in part, by an increase in MWh produced and purchased.

The prices of oil, gas, solid fuels and purchased power have fluctuated over this period; and from year to year the components of fuel and purchased power expenses have shifted as JEA has taken advantage of the most economical sources of power. Energy produced from JEA's generating units was 8,404,272 MWh for the Fiscal Year ended September 30, 2016, an increase of 9.6 percent from 7,666,954 MWh for the Fiscal Year ended September 30, 2015. Energy purchased was 4,850,065 MWh for the Fiscal Year ended September 30, 2016, a decrease of 8.7 percent from 5,309,710 MWh for the Fiscal Year ended September 30, 2015.

Net Revenues. Net revenues available for debt service increased \$34.5 million, or 7.5 percent, to \$496.1 million for the Fiscal Year ended September 30, 2016 from \$461.6 million for the Fiscal Year ended September 30, 2015. Total revenues decreased \$3.5 million, or 0.3 percent, and total operating expenses decreased \$38.0 million, or 4.8 percent, for the Fiscal Year ended September 30, 2016 as compared to the Fiscal Year ended September 30, 2015, as described above. The increase in net revenues available for debt service is primarily related to the decrease in the amount paid from the Revenue Fund into the Rate Stabilization Fund and the decrease in fuel and purchased power expenses offset, in part, by the decrease in electric revenues as described above.

**Debt Service on Electric System Bonds.** The debt service requirement on Electric System Bonds decreased 5.4 percent for the Fiscal Year ended September 30, 2016 as compared to the Fiscal Year ended September 30, 2015, primarily related to lower interest expense due to lower debt balances and Fiscal Year 2015 bond refundings.

JEA did not issue any Electric System Bonds during the Fiscal Year ended September 30, 2016. During the Fiscal Year ended September 30, 2015, JEA issued Electric System Bonds as summarized in the following table:

Series Three	<u>Purpose</u>	<b>Month Issued</b>	Par Amount <u>Issued</u>	Par Amount <u>Refunded</u>
2015A	Refunding(1)	March 2015	\$83,325,000	\$84,280,000
2015B	Refunding <sup>(1)</sup>	July 2015	\$42,355,000	\$69,585,000

<sup>(1)</sup> Fixed rate bonds issued to refund fixed rate bonds.

<u>Debt Service Coverage Ratio on Electric System Bonds</u>. The debt service coverage ratio on Electric System Bonds increased to 6.59 times for the Fiscal Year ended September 30, 2016 as compared to the debt service coverage ratio of 5.80 times for the Fiscal Year ended September 30, 2015 as a result of the 7.5 percent increase in net revenues available for debt service and the 5.4 percent decrease in the debt service requirement on Electric System Bonds between such periods.

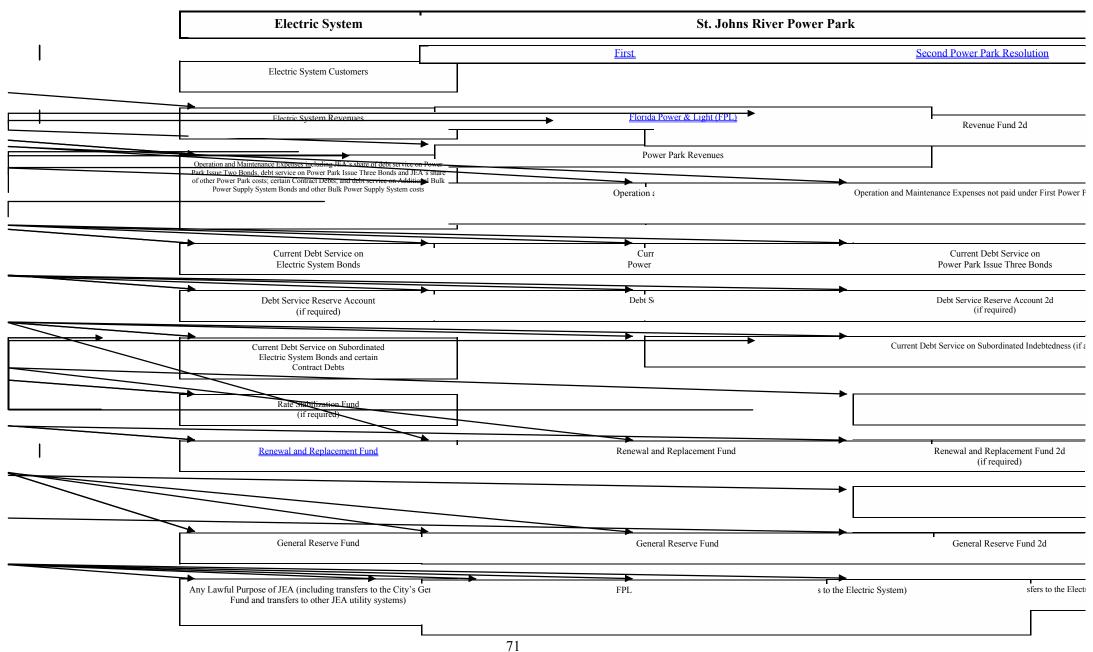
Aggregate Subordinated Debt Service on Subordinated Electric System Bonds. Aggregate subordinated debt service on Subordinated Electric System Bonds increased 0.1 percent for the Fiscal Year ended September 30, 2016 as compared to the Fiscal Year ended September 30, 2015, primarily related to higher principal amortization offset, in part, by lower interest expense due to lower debt balances.

<u>Bonds</u>. The debt service coverage ratio on Electric System Bonds and Subordinated Electric System Bonds increased to 2.89 times for the Fiscal Year ended September 30, 2016 as compared to the debt service coverage ratio of 2.63 times for the Fiscal Year ended September 30, 2015 as a result of the 7.5 percent increase in net revenues available for debt service and the 2.4 percent decrease in the debt service requirement on Electric System Bonds and Subordinated Electric System Bonds between such periods.

#### APPLICATION OF ELECTRIC SYSTEM REVENUES

The following chart shows a summary of the major components of the application of revenues under the Electric System Resolution, the First Power Park Resolution, the Second Power Park Resolution and the Restated and Amended Bulk Power Supply System Resolution. For a discussion of certain proposed amendments to the Electric System Resolution that amend the provisions thereof with respect to the priority of payment of JEA's obligations with respect to the Power Park, see the subsection "FINANCIAL INFORMATION RELATING TO ELECTRIC UTILITY SYSTEM - ELECTRIC UTILITY FUNCTIONS - Debt Relating to Electric Utility Functions - Proposed Amendments to the Electric System Resolution" - May 1998 Amending Resolution" herein and "SUMMARY OF CERTAIN PROVISIONS OF THE ELECTRIC SYSTEM RESOLUTION - Proposed Amendments to the Electric System Resolution – May 1998 Amending Resolution" in APPENDIX B attached hereto.

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#### OTHER FINANCIAL INFORMATION

#### General

JEA maintains separate accounting records for the Electric System, the Scherer 4 Project (which is sometimes referred to herein and in JEA's financial statements as the "Bulk Power Supply System"). and its interest in the Power Park. For purposes of financial reporting, however, JEA prepares combined financial statements that include the Electric System, the Bulk Power Supply System, JEA's interest in the Power Park, the Water and Sewer System and the District Energy System. Set forth in APPENDIX A hereto are (a) the financial statements of JEA for its Fiscal Year 2016 (which consist of the statement of net position of JEA as of September 30, 2016 and the related statement of revenues, expenses, and changes in net position and cash flows for the year then ended and the notes thereto; such financial statements are hereinafter referred to as "JEA's 2016 Financial Statements"), together with the report of Ernst & Young ILP, independent auditors, on such financial statements, (b) certain supplemental data as of September 30, 2016 and for the year then ended (which consist of the combining statement of net position, the combining statement of revenues, expenses and changes in net position and the combining statement of cash flows) and (c) certain statements of both dompliance information (which consist of schedules of debt service coverage for the year ended September 30, 2016 for the Electric System, the Bulk Power Supply System, JEA's interest in the Power Park, the Water and Sewer System and the District Energy System), together with the report of Ernst & Young LLP, independent auditors, on such schedules. All such statements, information, data and schedules should be read in conjunction with the notes to JEA's 2<del>016 Financial Statements, which are an integral</del> part of the financial statements.

The assets reflected in the statement of net position included in JEA's 2016 Financial Statements include all of the assets of the Electric System, the Bulk Power Supply System, JEA's interest in the Power Park, the Water and Sewer System and the District Energy System, and the liabilities reflected in such statement of net position include, among other things, the Electric System Bonds, the Supordinated Electric System Bonds, the Power Park Issue Two Bonds, the Power Park Issue Three Bonds, the Additional Bulk Power Supply System Bonds, the Water and Sewer System Bonds, the Subordinated Water and Sewer System Bonds and the District Energy System Bonds. The statement of revenues, expenses, and changes in net assets includes all expenses (e.g., interest charges, operating and maintenance expenses, fuel expenses) of the Electric System, the Bulk Power Supply System. However, revenues of JEA's interest in the Power Park and the Bulk Power Supply System are not included in such statement of revenues, expenses, and changes in net assets, except that interest income on funds maintained under the First Power Park Resolution, the Second Power Park Resolution and the Restated and Amended Bulk Power Supply System Resolution and revenues received from the FPL-Power Park Sale are included in the statement of revenues, expenses, and changes in net assets.

For financing purposes, the debt of JEA relating to the Electric Utilities Functions, the debt of JEA relating to its Water and Sewer System and the debt of JEA relating to the District Energy System are payable from and secured by separate revenue sources (*i.e.*, (a) the debt of JEA relating to its Electric Utility Functions is payable from and secured by the revenues derived by the Electric System from the sale of electricity and related services; (b) the debt of JEA relating to the Water and Sewer System is payable from and secured by the revenues derived by the Water and Sewer System from the sale of water and the provision of wastewater treatment and related services; and (c) the debt of JEA relating to the District Energy System is payable from and secured by the revenues derived by the District Energy System from the sale of chilled water and related services; provided, however, available revenues of the Water and Sewer System shall be deposited into a Debt Service Reserve Account established for the District Energy System Refunding Revenue Bonds, 2013 Series A (Federally Taxable) (the "2013 DES Bonds") and pledged to pay debt service on the 2013 DES Bonds in the event that revenues of the

District Energy System are insufficient to pay debt service on the 2013 DES Bonds). Accordingly, potential purchasers of the Electric System Bonds are advised that the information in JEA's 2016 Financial Statements relating to JEA's Water and Sewer System and District Energy System is not relevant to a decision to purchase the Electric System Bonds and should not be taken into account with respect thereto.

#### **Transfers to the City**

The Charter currently provides that, as consideration for the unique relationship between the City and JEA, there shall be assessed upon JEA in each Fiscal Year, for the uses and purposes of the City, from the revenues of the Electric System and Water and Sewer System operated by JEA available after the payment of all costs and expenses incurred by JEA in connection with the operation of the Electric System and the Water and Sewer System (including, without limitation, all costs of operation and maintenance, debt service on all obligations issued by JEA in connection with such Electric System and the Water and Sewer System and required reserves therefor and the annual deposit to the depreciation and reserve account required pursuant to terms of the Charter), an amount that is periodically negotiated by JEA and the City. The City's annual assessment of JEA does not include assessments pertaining to the District Energy System. The Charter provides that the Council may reconsider the assessment calculations every five years; however, pursuant to the Charter, the Council may also revise the assessments at any time by amending the Charter with a two-thirds vote of the Council. From time to time, proposals have been made, and may be made in the future, to increase the amount of the City's annual assessment on JEA.

Effective October 1, 2008, JEA is required to pay to the City a combined assessment for the Electric System and the Water and Sewer System and this combined assessment has been set forth in the Charter.

JEA and the City reached agreement on amendments ("2016 Amendments") to the Charter which affect the amount of the combined assessment that JEA is required to pay to the City. The 2016 Amendments were set forth in Ordinance 2015-764 were approved by the Council on March 8, 2016 and took effect on March 10, 2016, and provide that effective October 1, 2016, the combined assessment for the Electric System and the Water and Sewer System will be equal, but not exceed the greater of (A) the sum of (i) the amount calculated by multiplying 7.468 mills by the gross kilowatt hours delivered by JEA to retail users of electricity in JEA's service area and to wholesale customers under firm contracts having an original term of more than one year (other than sales of energy to FPL from JEA's St. Johns River Power Park System) during the 12-month period ending on April 30 of the Fiscal Year immediately preceding the Fiscal Year for which such assessment is applicable, plus (ii) the amount calculated by multiplying 389.20 mills by the number of K-Gals (1=1000) gallons) potable water and sewer service, excluding reclaimed water service, provided to consumers during the 12-month period ending on April 30 of the Fiscal Year immediately preceding the Fiscal Year for which such assessment is applicable or (B) a minimum calculated amount which increases by 1 percent per year from Fiscal Year 2016-2017 through Fiscal Year 2020-2021 using the Fiscal Year 2015-16 combined assessment of \$114,187,538 as the base year. The amounts applicable to clause (B) above are: for Fiscal Year 2016-2017 -\$115,329,413; for Fiscal Year 2017-2018 - \$116,482,708; for Fiscal Year 2018-2019 - \$117,647,535; for Fiscal Year 2019-2020 - \$118,824,010; and for Fiscal Year 2020-2021 - \$120,012,250. A "mill" is one one-thousandth of a U.S. Dollar. The 2016 Amendments provide that the amended assessment calculations for the electric system and the water and sewer system shall be in effect until September 30, 2021 and that the Council may reconsider the assessment calculations after October 1, 2020 and changes, if any, shall become effective October 1, 2021. As provided in the Charter, the Council may change the assessment calculation by ordinance within the provisions of the relevant section of the Charter. The 2016 Amendments contemplate that in the event the Council does not reconsider the assessment calculations, the assessments shall be calculated using the existing formulas specified in the Charter,

including a minimum calculated amount in clause (B) therein, which increases by one percent per year for each fiscal year computed as provided in the Charter.

In addition to the changes to the annual assessment, the 2016 Amendments provide that JEA, pursuant to the terms of an Interagency Agreement with the City, agrees to provide total nitrogen water quality credit to the City to assist the City in meeting its Basin Management Action Plan load reduction goal ("BMAP Credit"). The 2016 Amendments provide that if JEA cannot provide the BMAP Credit pursuant to the terms of the Interagency Agreement, the Council and JEA shall work cooperatively to address the BMAP Credit shortfall or the Council may reconsider the assessment calculations.

In recognition of the agreement to amend the Charter as described above, JEA paid to the City an additional one-time contribution in the Fiscal Year ending September 30, 2016 of \$15,000,000 (the "Additional Contribution"). The City has committed to use the Additional Contribution for City water and sewer infrastructure projects.

The portion of the budgeted aggregate assessment calculated with respect to the Electric System has increased from approximately \$91,720,182 for the Fiscal Year ended September 30, 2016 to \$92,270,692 for the Fiscal Year ending September 30, 2017. While the Charter requires JEA to pay the JEA assessment to the City at such times as the City requests, but not in advance of collection, the Ordinance Code of the City requires JEA to pay the JEA assessment on a monthly basis. Pursuant to Section 21.07(f) of the Charter, although the calculation of the amounts assessed upon JEA pursuant to the Charter and the annual transfer of available revenues from JEA to the City pursuant to the Charter are based on formulas that are applied specifically to the respective utility systems operated by JEA, JEA may, in its discretion, determine how to allocate the aggregate assessment between the Electric System and the Water and Sewer System, and the aggregate assessment may be paid from any available revenues of JEA.

In addition, the Charter provides that the Council shall have the power to appropriate annually a portion of the available revenues of each utility system operated by JEA (other than electric, water and sewer systems) for the uses and purposes of the City in an amount to be based on a formula to be agreed upon by JEA and the Council.

The Charter imposes a monthly Franchise Fee which JEA was required to pay to the City commencing June 1, 2008 for revenues derived effective April 1, 2008 in an amount initially equal to three percent (and not to exceed six percent, with increases requiring a request by the Mayor of the City and a two-thirds supermajority vote by the Council) of the revenues of the Electric System derived within Duval County other than the beach communities and the Town of Baldwin and subject to a per customer maximum. The Charter authorizes JEA to pass through the amount of the Franchise Fee to the customers of JEA, which JEA does. As a result, the Franchise Fee has no effect on JEA's net revenues.

#### **Effect of JEA Credit Rating Changes**

#### General

JEA has entered into certain agreements that contain provisions giving counterparties certain rights and options in the event of a downgrade in JEA's credit ratings below specified levels, which provisions commonly are referred to as "ratings triggers."

The table below sets forth the current ratings for JEA's Electric System Bonds and Subordinated Electric System Bonds, without giving effect to any third-party credit enhancement. Given JEA's current levels of ratings, JEA's management does not believe that the ratings triggers contained in any of its existing agreements will have a material adverse effect on its results of operations or financial condition.

However, JEA's ratings reflect the views of the rating agencies and not of JEA, and therefore JEA cannot give any assurance that its ratings will be maintained at current levels for any period of time.

	Fitch Ratings	Moody's	S&P
Outstanding Electric System Bonds	AA	Aa2	AA-
Outstanding Subordinated Electric System Bonds	AA	Aa3	A+

#### Liquidity Support for JEA's Variable Rate Bonds

In particular, JEA has entered into standby bond purchase agreements with certain commercial banks in order to provide liquidity support in connection with tenders for purchase of the Senior Liquidity Supported Electric Bonds, and the Subordinated Liquidity Supported Electric Bonds (collectively the "Liquidity Supported Bonds"). As of the date of this Annual Disclosure Report, there is \$243,625,000 in aggregate principal amount of Senior Liquidity Supported Electric Bonds outstanding and \$132,420,000 in aggregate principal amount of Subordinated Liquidity Supported Bonds outstanding. The standby bond purchase agreements relating to the Liquidity Supported Bonds provide that any of such Liquidity Supported Bonds that are purchased by the applicable bank pursuant to its standby bond purchase agreement may be tendered or deemed tendered to JEA for payment upon the occurrence of certain "events of default" with respect to JEA under such standby bond purchase agreement. Upon any such tender or deemed tender for purchase, such Liquidity Supported Bonds so tendered or deemed tendered will be due and payable immediately.

In general, each standby bond purchase agreement provides that it is an event of default on the part of JEA thereunder if the long-term ratings on the Liquidity Supported Bonds to which such standby bond purchase agreement relates, without giving effect to any third-party credit enhancement, fall below "BBB-" by Fitch Ratings, "Baa3" by Moody's Investors Service ("Moody's") and / or "BBB-" by Standard & Poor's, a business of Standard & Poor's Financial Services LLC, a limited liability company, organized and existing under the laws of the State of Delaware ("S&P"), or are suspended or withdrawn (generally for credit-related reasons).

#### **Interest Rate Swap Transactions**

From time to time, JEA enters into interest rate swap transactions pursuant to both its debt management policy (see "Debt Management Policy" below ) and its investment policies (see "Investment Policies" below), which interest rate swap transactions may be for the account of the Electric System. JEA had interest rate swap transactions outstanding under interest rate swap master agreements with four different counterparties in an aggregate notional amount of \$531,605,000 as of September 30, 2016, of which, \$407,585,000 were for the account of the Electric System. For additional information concerning those interest rate swap transactions, see (a) "Debt Management Policy" below, (b) "Investment Policies" below and (c) Notes 1(k) and 8 to JEA's 2016 Financial Statements set forth in APPENDIX A attached hereto.

Under each master agreement, the interest rate swap transactions entered into pursuant to that master agreement are subject to early termination upon the occurrence and continuance of certain "events of default" and upon the occurrence of certain "termination events." One of such "termination events" with respect to JEA is a suspension or withdrawal of certain credit ratings with respect to JEA or a downgrade of such ratings to below the levels set forth in the master agreement or in the confirmation related to a particular interest rate swap transaction. Upon any such early termination of an interest rate swap transaction, JEA may owe to the counterparty a termination payment, the amount of which could be substantial. The amount of any such potential termination payment would be determined in the manner provided in the applicable master agreement and would be based primarily upon market interest rate levels and the remaining term of the interest rate swap transaction at the time of termination. In general,

the ratings triggers on the part of JEA contained in the master agreements range from (x) below "BBB" by S&P and below "Baa2" by Moody's to (y) below "A-" by S&P and below "A3" by Moody's.

As of September 30, 2016, JEA's estimated aggregate exposure under all of its then outstanding interest rate swap transactions (*i.e.*, the net amount of the termination payments that JEA would owe to its counterparties if all of the interest rate swap transactions were terminated) was \$181,794,000, of which \$145,808,000 was attributable to interest rate swap transactions entered into for the account of the Electric System. As of March 31, 2017, JEA's estimated aggregate exposure under all of its then outstanding interest rate swap transactions was \$\frac{1167,867,000}{97,781,000}\$ was attributable to interest rate swap transactions entered into for the account of the Electric System.

In connection with the issuance or proposed issuance of certain of JEA's bonds, JEA has entered into various floating-to-fixed rate interest rate swap transactions for the account of the Electric System. These swap transactions are entered into with various providers and are otherwise described in the table below.

National

Related <u>Bonds</u>	<u>Counterparty</u>	Initial Notional <u>Amount</u>	Notional Amount as of <u>March 31, 2017</u>	Fixed Rate of Interest	Variable <u>Rate Index<sup>(1)</sup></u>	Termination <u>Date<sup>(2)</sup></u>
Variable Rate Electric System Revenue Bonds, Series Three 2008A	Goldman Sachs Mitsui Marine Derivative Products, L.P. ("GSMMDP")	\$100,000,00 0	\$51,680,000	3.836%	BMA Municipal Swap Index	10/1/2036
Variable Rate Electric System Revenue Bonds, Series Three 2008B-1,	Morgan Stanley Capital Services Inc. ("MSCS")	\$117,825,00 0	\$82,575,000	4.351%	BMA Municipal Swap Index	10/1/2039
2008B-2, 2008B-3 and 2008B-4	JPMorgan Chase Bank, N.A. ("JPMorgan")	\$116,425,00 0	\$86,000,000	3.661%	68% of 1 month LIBOR	10/1/2035
Variable Rate Electric System Revenue Bonds, Series Three 2008C-1 and 2008C-2	GSMMDP	\$174,000,00 0	\$84,800,000	3.717%	68% of 1 month LIBOR	9/16/2033
Variable Rate Electric System Revenue Bonds, Series Three 2008D-1	MSCS	\$98,375,000	\$62,980,000	3.907%	SIFMA Municipal Swap Index	10/1/2031
Variable Rate Electric System Subordinated Revenue Bonds, 2008 Series D	JPMorgan	\$40,875,000	\$39,175,000	3.716%	68% of 1 month LIBOR	10/1/2037

<sup>(1)</sup> The BMA Municipal Swap Index is now known as the SIFMA Municipal Swap Index.

<sup>(2)</sup> Unless earlier terminated.

#### **Debt Management Policy**

JEA's debt management policy applies to all current and future debt and related hedging instruments issued by JEA. The policy is designed to provide both broad policy guidance and facilitate management, control and oversight of JEA's debt function, thus fostering ongoing access to the capital markets in order to fund future capital projects of JEA.

The counterparties with whom JEA may deal must meet the requirements for counterparties described under the caption "Investment Policies" below. The policy requires JEA staff to submit to the JEA Board an annual plan of finance, which will address, at a minimum, the amount of debt projected to be issued during the next Fiscal Year, whether such debt is senior or subordinated, whether such debt is fixed or variable, and whether any hedging instruments may be utilized. Under the policy, JEA's net variable rate debt will not exceed 30 percent of total debt and JEA's net variable rate debt plus net fixed-to-floating interest rate swaps will not exceed 55 percent of total debt. "Net variable rate debt" is actual variable rate debt minus net variable rate assets. "Net variable rate assets" is actual variable rate assets minus the notional amount of investment/asset-matched interest rate swaps. "Net fixed-to-floating interest rate swaps" is the aggregate notional amount of fixed-to-floating swaps maturing in 10 years or less minus the aggregate notional amount of floating-to-fixed swaps maturing in 10 years or less outstanding on the last day of each month. "Total debt" equals fixed rate debt plus variable rate debt. "Variable rate assets" are investments maturing in less than one year. "Variable rate debt" is actual variable rate debt outstanding less variable rate debt that is associated with a floating-to-fixed rate swap where the term of the swap matches the term of the variable rate debt. The percentages are to be computed monthly.

JEA's fixed rate debt, variable rate debt and debt-related hedging instruments are to be managed in conjunction with investment assets and investment-related hedging instruments to incorporate the natural occurrence of hedging impacts in those balance sheet categories. The purpose is to use each side of the balance sheet to mitigate or hedge cash flow risks posed by the other side of the balance sheet.

The policy creates procedures to be followed in conjunction with the issuance of fixed rate debt, variable rate debt and debt refundings. Beginning in the Fiscal Year ended September 30, 2010, deposits were made to the Rate Stabilization Fund for the Debt Management Strategy Reserve and reflect the difference in the actual interest rates for interest expense on the unhedged variable rate debt as compared to the budgeted assumptions for interest expense on the unhedged variable rate debt. At a minimum, 50 percent of the calculated reserve will be recorded and deposited each fiscal year. An additional amount, up to the full value of the calculated reserve (the remaining 50 percent), will be reviewed by the Debt and Investment Committee and recorded at their option. However, the amount deposited to the Rate Stabilization Fund (in addition to actual debt service costs for the fiscal year) cannot exceed the total amount of the budgeted debt service. The reserve will be calculated on a system by system basis; however, based on the calculation, any mandatory deposit will exclude the District Energy System. The reserve is capped at five percent of the par amount of the total outstanding variable rate debt. Withdrawals from the Debt Management Strategy Stabilization Fund for debt management strategy can be used for any lawful purpose including debt service, debt repayment, and capital outlay and must be approved in writing by the Managing Director and Chief Executive Officer. Under JEA's pricing policy, withdrawals from the Debt Management Strategy Stabilization Fund are limited to expenses related to market disruption in the capital markets, disruption in availability of credit or unanticipated credit expenses, or to fund variable interest costs in excess of budget. Any amounts withdrawn for these costs will subsequently be presented for approval by the Board.

The policy establishes a framework for JEA's utilization of hedging instruments including interest rate swaps and caps and collars. The utilization of hedging instruments offers JEA a cost

effective alternative to traditional debt financing choices. JEA is authorized to enter into floating-to-fixed rate swaps, fixed-rate-to-floating rate swaps and basis swaps (*i.e.*, swaps which seek to manage the risk associated with the mismatch between two benchmarks used to set the indices utilized in an interest rate swap transaction). The percentage of variable rate exposure (the notional amount of net fixed-to-floating interest rate swaps and net variable rate debt outstanding) to total debt outstanding may not exceed 55 percent. The notional amount of interest rate swaps, caps, collars and related hedging instruments is limited to the amount approved by the JEA Board from time to time.

Interest rate caps and related hedging instruments are to be utilized to help JEA manage interest rate risk in its debt management program. Generally, a fixed-to-floating interest rate swap will have an associated interest rate cap for the same notional amount at a level no greater than 200 basis points above the interest rate swap fixed rate. It is also contemplated that an interest rate cap will not always have the same maturity as the interest swap with which it is associated. The average life of the aggregate of outstanding caps will not be less than 75 percent of the average life of the associated aggregate swaps.

The policy sets out various decision rules which govern the decision to execute various hedging instruments. Valuations are performed on a quarterly basis and adjustments to fair value are included in JEA's financial statements.

The policy calls for no more than \$500,000,000 of net interest rate swap and cap or other hedging instruments to be outstanding in the aggregate with any one provider or affiliate thereof. The aggregate amount of all "long dated" (greater than 10 years) transactions executed with financial institutions and all affiliates thereof, shall be limited to an amount based on the credit rating of the financial institution at the time of the entry into the long dated hedging transaction as shown below:

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

The ratings criteria shown above apply either to the counterparty to the long dated transaction or, if the payment obligation of such counterparty under the relevant swap agreement shall be guaranteed by an affiliate thereof, such affiliate. The overall maximum by definition of the above limits cannot exceed \$400,000,000 for long dated transactions.

These diversification requirements include all interest rate swap, cap and other hedging instruments JEA may utilize to manage interest rate risks including, but not limited to, debt management and 100 percent investment/asset-matched program. Interest rate swap and cap transactions are to be competitively bid (unless otherwise determined by the Managing Director and Chief Executive Officer) by at least three providers that have executed interest rate swap agreements with JEA.

Under the policy, an annual budgeted reserve contribution is to be made to a reserve fund. The contributions to the reserve fund will be funded in three equal installments of 1 percent of the notional amount beginning in the month the swap is executed. Once funded, the reserve fund shall at all times be not less than three percent of the notional amount of fixed-to-floating rate debt interest rate swaps outstanding, but can be used for any lawful purpose as approved by JEA's Managing Director and Chief Executive Officer.

The aggregate notional amount of all hedging instrument transactions entered into for the account of the Electric System outstanding at any one time, net of offsetting transactions, under all swap agreements is established at not to exceed (a) \$1.5 billion in the case of interest rate swaps, (b)

\$500,000,000 in the case of basis swaps and (c) \$1 billion in the case of caps and collars. A transaction that reverses an original transaction in every respect thereby offsetting the cashflows perfectly is referred to herein as an "offsetting transaction." Generally, in the past JEA has elected to receive or pay an upfront cash payment to reverse the original swap transaction. The phrase "net of offsetting transactions" would relate to reversals that remain on JEA's books if JEA elected not to take/make an upfront cash payment.

#### **Investment Policies**

The goals of JEA's investment policy are to (i) provide safety of capital, (ii) provide sufficient liquidity to meet anticipated cash flow requirements, and (iii) maximize investment yields while complying with the first two goals. Sound investment management practices help maintain JEA's competitive position since investment income reduces utility rates. JEA's funds are invested only in securities of the type and maturity permitted by its bond resolutions, Florida statutes, its internal investment policy and federal income tax limitations. JEA does not speculate on the future movement of interest rates and is not permitted to utilize debt leverage in its investment portfolio. Debt leverage is the practice of borrowing funds solely for the purpose of reinvesting the proceeds in an attempt to earn more income than the cost of the debt.

JEA invests its funds pursuant to Section 218.415, Florida Statutes, its various bond resolutions and its JEA Board-approved investment policy. As of September 30, 2016, 54 percent of JEA's total investment portfolio (including funds held under the Water and Sewer System Resolution, the Subordinated Water and Sewer System Resolution, the District Energy System Resolution, the Bulk Power Supply System Resolution, the Electric System Resolution, the Subordinated Electric System Resolution, the First Power Park Resolution and the Second Power Park Resolution) was invested in securities issued by the United States Government, federal agencies or state and local government entities and has a weighted average maturity of approximately 3.0 years. As of September 30, 2016, the remaining 46 percent of such investment portfolio was invested in commercial paper rated at least "A-1" and "P-1" by S&P and Moody's, respectively, having a weighted average maturity of less than 120 days, in money market mutual funds and in demand deposit bank accounts. JEA's funds that are invested in commercial paper, in money market mutual funds and in bank accounts are used primarily for operating expenses.

JEA has entered into securities lending agreements in the past wherein from time to time JEA loaned certain securities in exchange for eligible collateral consisting of United States Government and federal agency securities whose market values were at least 103 percent of the market values of the loaned securities which were re-priced daily. JEA earned a fee in connection with such securities lending agreements, which augmented its portfolio yield. Although JEA currently does not have any securities held pursuant to its securities lending program, JEA may enter into similar securities lending agreements in the future.

JEA previously implemented a strategy to lengthen synthetically the investment maturity of its short-term revolving funds by entering into 100 percent asset-matched interest rate swap transactions. Through the use of this strategy, JEA may lock-in a fixed rate of return for up to five years on those funds, such as debt service sinking funds, that it is permitted to invest only in short-term investment securities. As of September 30, 2016, JEA had, and as of the date of this Annual Disclosure Report, JEA has, no outstanding interest rate swap transactions for this purpose, although it may enter into interest rate swap transactions for this purpose in the future.

The JEA Board has established limits on the notional amount of JEA's interest rate swap transactions and standards for the qualification of financial institutions with whom JEA may enter into interest rate swap transactions. The counterparties with whom JEA may deal must be rated (i)

"AAA/Aaa" by one or more nationally recognized rating agencies at the time of execution, (ii) "AA-/Aa3" or better by at least two of such credit rating agencies at the time of execution, or (iii) if such counterparty is not rated "A/A2" or better at the time of execution, ("AA-/Aa3" or better for interest rate swap transactions entered into prior to 2014), provide for a guarantee by an affiliate of such counterparty rated at least "A/A2" or better at the time of execution where such affiliate agrees to unconditionally guarantee the payment obligations of such counterparty under the swap agreement. In addition, swap agreements generally will require the counterparty to enter into a collateral agreement to provide collateral when (a) the ratings of such counterparty (or its guarantor) fall below "AA-/Aa3" by two rating agencies and (b) a termination payment would be owed to JEA. With respect to swap agreements entered into in 2014 between JEA and three swap counterparties, each counterparty will be required to provide collateral when (a) the ratings of such counterparty fall below "A+/A1" by any one of the rating agencies and (b) a termination payment would be owed to JEA above a specified threshold amount.

JEA's payment obligations under the interest rate swap transactions consist of periodic payments based upon fluctuations in interest rates and, in the event of a termination of a transaction prior to the stated term thereof, potential termination payments. The amounts of such potential termination payments are based primarily upon market interest rate levels and the remaining term of the transaction at the time of termination. JEA is authorized to enter into both (a) interest rate swap agreements the obligations of JEA under which are payable from available funds of the Electric System ("Electric System Swap Agreements") and (b) interest rate swap agreements the obligations of JEA under which are payable from available funds of the Water and Sewer System ("Water and Sewer System Swap Agreements").

In the case of interest rate swap transactions entered into pursuant to Electric System Swap Agreements, JEA's payment obligations thereunder are payable following the payment of the operation and maintenance expenses of the Electric System, including any Contract Debts of the Electric System, debt service on Electric System Bonds, debt service on any Subordinated Bonds of the Electric System (including Subordinated Electric System Bonds) and the deposits to the Renewal and Replacement Fund established by the Electric System Resolution.

All interest rate swap transactions for the account of the Electric System are required to be entered into pursuant to Electric System Swap Agreements. Interest rate swap transactions for the account of the Water and Sewer System may be entered into pursuant to either Water and Sewer System Swap Agreements or Electric System Swap Agreements. In the case of interest rate swap transactions for the account of the Water and Sewer System that are entered into pursuant to Electric System Swap Agreements, JEA has established procedures pursuant to which (a) all amounts received by JEA pursuant to such interest rate swap transactions are transferred to the Revenue Fund established pursuant to the Water and Sewer System Resolution and (b) all payments required to be made by JEA pursuant to such interest rate swap transactions are paid for from Revenues of the Water and Sewer System; provided, however, that no such payments may be made from Revenues of the Water and Sewer System until payment (or provision for payment) has been made of the operation and maintenance expenses of the Water and Sewer System, including any Contract Debts of the Water and Sewer System, debt service for the Water and Sewer System Bonds, debt service for any Subordinated Indebtedness of the Water and Sewer System (including the Subordinated Water and Sewer System Bonds) and the deposits to the Renewal and Replacement Fund established by the Water and Sewer System Resolution.

For further information regarding this interest rate swap program, see Notes 1(k) and 8 to JEA's 2016 Financial Statements set forth in APPENDIX A attached hereto.

#### **Revolving Credit Facilities**

Effective December 17, 2015, JEA entered into a revolving credit agreement with JPMorgan Chase Bank, National Association for a \$300,000,000 commitment (the "Revolving Credit Facility").

The Revolving Credit Facility is scheduled to expire on December 17, 2018. Subject to meeting various conditions, the Revolving Credit Facility is available to JEA to provide working capital and short-term and interim financing for capital projects in connection with any of its systems. Payment obligations allocable to the Electric System, Power Park (under the Second Power Park Resolution) and the Bulk Power System under the Revolving Credit Facility are payable from the respective revenues of the Electric System, Power Park (under the Second Power Park Resolution) and the Bulk Power Supply System, as applicable, but are subordinate to the payment of JEA's Electric System, Power Park and Bulk Power Supply System debt (including the Electric System Bonds, the Subordinated Electric System Bonds, the Power Park Issue Three Bonds, and the Additional Bulk Power Supply System Bonds). As of the date of this Annual Disclosure Report, JEA has \$3,000,000 in borrowings outstanding under the Revolving Credit Facility, which are for the account of the Water and Sewer System.

#### **Loans Among Utility Systems**

Pursuant to the Charter, JEA has the authority to lend money from one of its utility systems to another of its utility systems under terms and conditions as determined by JEA. As of the date of this Annual Disclosure Report, no loans among the systems are outstanding.

#### **No Default Certificates**

Section 13.F of the Electric System Resolution and Section 6.08 of the Subordinated Electric System Resolution require that JEA annually obtain a certificate of its independent firm of certified public accountants setting forth any default on the part of JEA of any covenant in the Electric System Resolution and the Subordinated Electric System Resolution. Section 716.3 of the First Power Park Resolution, Section 715.2 of the Second Power Park Resolution, and Section 714.2 of the Restated and Amended Bulk Power Supply System Resolution require that JEA annually obtain a certificate of its independent firm of certified public accountants stating whether or not, to the knowledge of the signer, JEA is in default with respect to any of the covenants, agreements or conditions on its part contained in the First Power Park Resolution, the Second Power Park Resolution, and the Restated and Amended Bulk Power Supply System Resolution, respectively, and if so, the nature of such default. The actual certificates provided by such accountants state that nothing has come to such accountants' attention that caused such accountants to believe that JEA failed to comply with the terms, covenants, provisions or conditions of the applicable section(s) of the relevant resolutions, insofar as they relate to accounting matters (emphasis supplied). The accountants have advised JEA that the italicized qualifying language is required to be included by their professional standards (specifically, Statement on Auditing Standards No. 62). JEA does not believe that any other nationally-recognized accounting firm will provide certificates that strictly meet the requirements of the applicable section(s) of the relevant resolutions and that differ materially from the certificates provided by JEA's accountants.

As required by the First Power Park Resolution JEA has filed with U.S. Bank National Association, as Trustee, within 120 days after the end of JEA's Fiscal Year Ended September 30, 2016, a certificate signed by an Authorized Officer (as defined in the First Power Park Resolution) of JEA which states that to the best of his knowledge and belief JEA has kept, observed, performed and fulfilled each and every one of its covenants and obligations contained in the First Power Park Resolution and that there does not exist on the date of such certificate any default by JEA under the First Power Park Resolution or any Event of Default (as defined in the First Power Park Resolution) which, with the lapse of time specified in the applicable section of the First Power Park Resolution, would become an Event of Default.

Notwithstanding the failure of the accountants' certificates to strictly meet the requirements of the respective resolutions as described above, as of the date of this Annual Disclosure Report, JEA is not in default in the performance of any of the covenants, agreements or conditions contained in the Electric

System Resolution, the Subordinated Electric System Resolution, the First Power Park Resolution, the Second Power Park Resolution, and the Restated and Amended Bulk Power Supply System Resolution.

#### **Impact of Hurricane Matthew**

On Friday, October 7, 2016, Hurricane Matthew, a category 3 hurricane, impacted Northeast Florida. The storm caused widespread damage throughout the greater Jacksonville area and to JEA's Electric System and Water and Sewer System, resulting in electric outages to 245,000 customers and 69 sanitary sewer overflows ("SSOs"). Electric System damage was primarily limited to the distribution grid. Electrical supply interruptions and backup electrical supply faults at wastewater pump stations were the primary causes of the SSOs. Approximately 90 percent of JEA's electric customers had power by the evening of Monday, October 10, 2016. Restoration of power to the last of the remaining Electric System customers was completed by Saturday, October 15, 2016.

JEA estimates that its costs and expenses resulting from Hurricane Matthew will total approximately \$20 million, of which approximately \$17.6 million is attributable to the Electric System and approximately \$2.4 million is attributable to the Water and Sewer System. JEA expects to recover approximately \$18.6 million of storm-related costs from the following three sources: (1) approximately \$8.7 million from the Federal Emergency Management Agency ("FEMA"); (2) approximately \$1.4 million from the State of Florida (the "State"); and (3) approximately \$8.5 million from claims made on JEA's property insurance policy; the remaining approximately \$1.4 million is expected to be paid from JEA's \$10 million self-insurance reserves.

The actual amounts and timing for receipt of funds from its property insurance, the State and FEMA cannot be predicted at this time. JEA currently believes that it has sufficient operating cash available to meet its requirements during this time.

#### LITIGATION

In the opinion of the Office of General Counsel of the City, there is no pending litigation or proceedings that may result in any material adverse change in the financial condition of JEA relating to the Electric System other than as set forth in the financial statements of JEA in Appendix A of this Annual Disclosure Report and other than the matters set forth in this Annual Disclosure Report. Although it does not fall within the category of pending litigation or proceedings mentioned in the preceding sentence, there is a case pending in federal court relating to the installation and use of the Precision Flow System at certain Mid-America Apartment properties in the Jacksonville area. The claims against both the City and JEA are in the aggregate amount of approximately \$75 million and are for defamation, tortious interference with a contractual relationship (with Mid-America Apartment Communities Inc.) and tortious interference with an advantageous business relationship (with St. Johns County). While the litigation is in its early stages, each of the City and JEA believe it has good and meritorious defenses (sovereign immunity, among others) and will vigorously defend the action. Additionally, under Florida law any tort-related claims against the City and JEA have a liability limitation for the City and JEA equal to a maximum amount of \$300,000 per tort-related claim.

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#### **AUTHORIZATION**

The	dissemination	and use of	of this	Annual	Disclosure	Report hav	ve been	duly	authorized	by the
JEA Board.						_				

JEA	
By:	/s/ <del>[Thomas F. Petway III] Edward E.</del>
<u>Durr</u>	Chair
By:	/s/ Paul E. McElroy
•	ging Director and Chief Executive Officer

## Document comparison by Workshare Compare on Monday, April 10, 2017 11:47:01 AM

Input:	
Document 1 ID	netdocuments://4831-8052-5105/11
Description	ADR Electric System FYE 9-30-16 [Apr 2017]
Document 2 ID	netdocuments://4831-8052-5105/13
Description	ADR Electric System FYE 9-30-16 [Apr 2017]
Rendering set	Standard

Legend:	
<u>Insertion</u>	
<del>Deletion</del>	
Moved from	
Moved to	
Style change	
Format change	
Moved deletion	
Inserted cell	
Deleted cell	
Moved cell	
Split/Merged cell	
Padding cell	

Statistics:			
	Count		
Insertions	252		
Deletions	233		
Moved from	5		
Moved to	5		
Style change	0		
Format changed	0		
Total changes	495		

### III. B. 2.

Annual Report on JEA's Jacksonville Small & Emerging Business (JSEB) Program



March 27, 2017

SUBJECT:	ANNUAL REPORT ON JEA'S JACKSONVILLE SMALL AND EMERGING BUSINESS (JSEB) PROGRAM
Purpose:	
	as adopted, through its Procurement Code, the City of Jacksonville's JSEB program. An on the program's performance is required by the ordinance.
	Full transparency of these procurement actions is necessary to maintain public confidence ng process and to ensure JSEB program goals are achieved.
Effect: JEA's I Board.	Procurement Department is responsible for maintaining these records and reporting to the
Cost or Benefi business comm	fit: Supporting the JSEB program helps accelerate the potential for the Jacksonville small munity.
Recommende only.	ed Board action: No action is required by the Board. This item is presented for information
For additiona	Il information, contact: John McCarthy, Director Supply Chain Management (904) 665-5544

Submitted by: PEM/ MHD/ GNC



#### **Commitments to Action**





#### INTER-OFFICE MEMORANDUM

March 27, 2017

SUBJECT: ANNUAL REPORT ON JEA'S JACKSONVILLE SMALL AND

**EMERGING BUSINESS (JSEB) PROGRAM** 

FROM: Paul E. McElroy, Managing Director/CEO

**TO:** JEA Board of Directors

#### **BACKGROUND:**

JEA has previously adopted, through its Procurement Code, the City's Jacksonville Small and Emerging Business Program (JSEB), which was implemented in October 2004 under City Ordinance 2004-602. An annual report on the program's performance is required by the ordinance.

#### **DISCUSSION:**

The City Ordinance requires companies to spend an overall goal of at least 20% of their available spending budget with local small businesses to meet the program requirements. JEA set an overall goal of 21% for FY16. Goals were also established for the four Minority Business Enterprise (MBE) categories.

JEA FY16 performance under the JSEB Program is summarized below:

JSEB/MBE Category	JSEB % Goal	JSEB % Actual
African American	7.00%	6.67%
Women Business Owned	8.00%	5.38%
Hispanic American	2.00%	0.20%
Asian American/Native American	2.00%	3.07%
Others (non MBE)	2.00%	6.38%
TOTAL	21.00%	21.70%

Note: JEA's FY16 available spending budget was \$46M.

JEA's Small Business Program's performance has been strong over the past fifteen years, achieving in excess of 20% of JEA's annual available spending. Moving forward, JEA will continue to pursue process improvements and success with regard to this Ordinance.

JEA will also continue to support the larger Minority Business Enterprise (MBE) business community. During FY16, JEA spent an additional \$3.0M with Women and Minority firms who did not qualify for the JSEB program.

#### **RECOMMENDATION:**

No action is required by the Board. This item is presented for information only.

Paul E. McElroy, Managing Director/CEO

PEM/MHD/GNC

# Jacksonville Small & Emerging Business Program

## Board of Directors Meeting April 18, 2017

John McCarthy, Director Supply Chain Management



## Background

- COJ established the JSEB Program in 2004 by City Ordinance after legal issues challenged its existing Minority Business Enterprise (MBE) Program
- JSEB is a local small business program which allows:



- COJ manages the application process for JSEB certification
  - 232 JSEBs currently certified

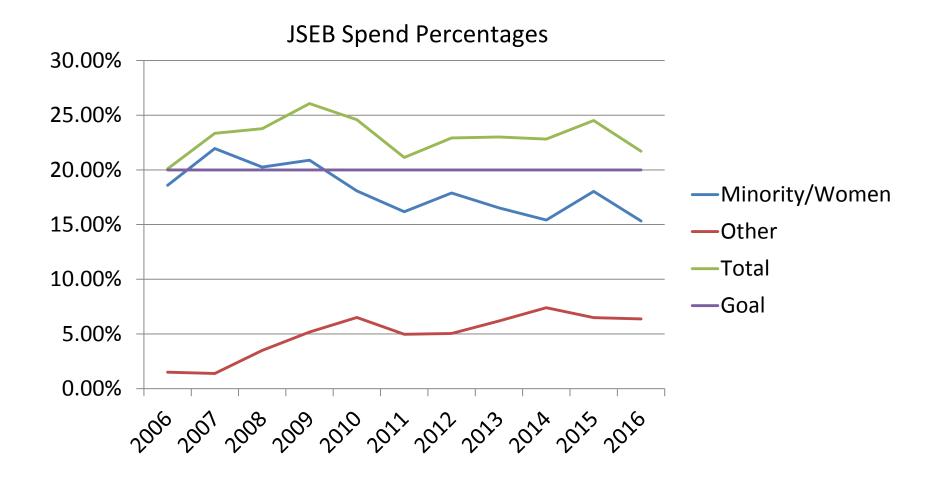


## Background

- JSEB program has been adopted by:
  - JEA
  - Jacksonville Aviation Authority (JAA)
  - Jacksonville Port Authority (JPA)
- Jacksonville Transportation Authority (JTA) and Duval County Public Schools (DCPS) utilize other programs depending on the source of funding, e.g., JTA is required to use the Disadvantaged Business Enterprise Program (DBE) since they are a recipient of Department of Transportation (DOT) funds.



# **Annual Report**





# FY16 Highlights



84 JSEB firms currently performing work (vs. 73 firms in FY15)

African
American
owned
construction
spend
increased by
37%

Women owned construction spend increased by 19%

\$500K prime contract payments made to an Asian American staffing firm

- Approximately 60% of JSEB spend is made to prime contractors
- 4 JSEB sheltered markets resulting in 10 contracts
  - o Concrete, Landscaping, Janitorial, Architectural Services



# Summary

# Consistent Management

Nadine Carswell,
 JSEB manager, as led the program for the last 11 years.

# Primary Area of Focus

- Implementation of procurement strategies
- Effective outreach activities

### JSEB Annual Spend Report

- Submitted to Board for past 10+ years
- FY16 results consistent with previous years
- Senior Leadership Team is engaged and critical to success
- 8 JSEB graduates in different types of work since programs inception
  - Engineering, Landscaping, Waste Disposal, Electric Supplies, Accounting, Architectural Services, Equipment, and Supplies



# What We Are Doing Now/Future

In 2013, JEA participated in a City-Wide Disparity Study Three tasks came from the study:

### TASK FORCE

Initiated a
Supplier
Diversity Joint
Agency Task
Force



### JSEB ENGAGEMENT

Working to get the word out



# JSEB MAJOR PROJECTS

Incorporating JSEB in major projects



# What We Are Doing Now/Future

### Joint Agency Task Force (JATF)

Members: COJ, JTA, JAA, JPA, JEA, DCPS

Provides "one-stop shopping" for all Jacksonville small businesses

Linked websites, jointly-sponsored outreach events, quarterly newsletter

Focusing on Disparity Study findings/opportunities, e.g. unbundling contracts, developing non-traditional markets



# **JOINT AGENCY** TASK FORCE WORKSHOP

### **TOPICS:**

· Commitment to Supplier Diversity · Disparity Study Recommendations Updates · Bidding Opportunities



RSVP:

**Beth Tramel** 

(904) 858-4860 tramelb@duvalschools.org

April 19, 2016

- Free Parking

- Light Refreshments

### **EVENT:** TUESDAY, **APRIL 26, 2016**

TIME: 5:30 PM - 7:30 PM

LOCATION:

**Legends Center** 5054 Soutel Dr, Jacksonville, FL 32208

# **JATF Quarterly Newsletter**



Issue 1 Volume 1 Dist. Date: 01/15/2016

### JAXPORT Awards Multi-Year Construction Mgmt. Contract to JSEB Firm

The Jacksonville Port Authority (JAX-PPOZI) recently awarded a multi-year Construction Management and Inspections Services contract to minority-owned and operated Construction & Engineering Service Consultants, Inc. (C&ES).

Although firms certified under the Jacksonville Small and Emerging Business (ISEB) program have served as sub-contractors in the past, this agreement marks the first time that a minority-owned JSEB firm has been selected as a prime contractor for port projects.

"Contracts like this ensure that everyone has access to what I see as the American Dream: to make a real contribution and prosper," said JAXPORT Board Chairman Dr. John Newman. "Having opportunities open to all has a proven, positive impact on the economic health of our community and that's a crucial part of our work here at the port."



JAXPORT's Dr. Newman congratulates C&ES Owner, Steve Davis, on the new contract,

#### JEA Bid Opportunities:

BID DESCRIPTION	TENTATIVE BID DATE
Janitorial Services - Downtown	February/ March 2016
(Open Bid)	
Janitorial Services - Generating Plants	February/ March 2016
(JSEB Set-Aside)	
Janitorial Services – Master Lift Stations, Chiller Plants and Substations	February/ March 2016
Janitorial Supplies and Training	February/ March 2016

#### JAXPORT Bid Opportunities:

l	BID DESCRIPTION	TENTATIVE BID DATE
l	Lawn Maint. Services (Open Bid)	January 2016
l	Janitorial Services (JSEB Set-Aside)	May 2016
l	Installation of Standby Generator (JSEB Set-Aside)	TBD 2016

#### JAA Bid Opportunities:

I	BID DESCRIPTION	TENTATIVE BID DATE
	Temporary Staffing Services (Open Bid)	January/March 2016
	Maint. & Repair Services for Control Tower Equipment (Open Bid)	January/March 2016
	Bond/Tax Counsel (Open Bid)	January/March 2016
	Parking & Revenue Control System (Open Bid)	January/March 2016

### DCPS Bid Opportunities:

Bid Description	Tentative Bid Date
Custodial Services (Small Business Sheltered)	February 2016

#### ITA Bid Opportunities:

January - Photometric	
Bid Description	Tentative Bid Date
JTAMW - Alta Drive CEI	Jan 2016
JTAMW - CEI Services for Kernan Blvd	Jan 2016
JTAMW - Collins Road Improvements CEI	Jan 2016
RFP (Shindler to Westport)	
Skyway Stations Roof Repair	Feb 2016
Skyway Fire Alarm and Security System	Feb 2016
Upgrade	
	JTAMW - Alta Drive CEI JTAMW - CEI Services for Kernan Blvd JTAMW - Collins Road Improvements CEI RFP (Shindler to Westport) Skyway Stations Roof Repair Skyway Fire Alarm and Security System

### Calendar of Events:

- Jan. 5th "Small Business Meet & Greet Doing Business With JAXPORT" (10am - 11am)
- Jan. 11th "Vendor Meet & Greet Doing Business with JAA" (2pm – 3pm)
- Jan. 12th "Hubzone: JSEB/SBA Workshop" (5:30pm 7:30pm)
- Jan. 19th "JTA: Supplier Information Workshop" (3:00pm)
- Jan.21st "JEA Seminar for Small Businesses" (3pm 5pm)
- Feb. 2nd "Small Business Meet & Greet Doing Business With JAXPORT" (10am - 11am)
- Feb. 8th "Vendor Meet & Greet Doing Business with JAA" (2pm - 3pm)
- Feb.16th "JAXPORT/Manson Construction Small Business Workshop" (8:30am - 3:30pm)
- Feb.16th "Banking Services: JSEB/SBA Workshop" (5:30pm - 7:30pm)
- Feb. 18th "JEA Seminar for Small Businesses" (3pm 5pm)
- March 1st "Small Business Meet & Greet Doing Business With JAXPORT" (10am - 11am)
- March 14th "Vendor Meet & Greet Doing Business with JAA" (2pm - 3pm)
- March 15th "JTA: Supplier Information Workshop" (3:00pm)
- March 15th "Tax Planning & Reporting: JSEB/SBA Workshop" (5:30nm - 7:30nm)
- March 17th "JEA Seminar for Small Businesses" (3pm 5pm)

### PURPOSE OF NEWSLETTER

Designed to create awareness, engage constructive dialog, inform the small business community of our efforts towards eliminating any persistent barriers towards small business inclusion and success regarding the award of both public and private sector contracting opportunities.

### DID YOU KNOW?

Duval County Public School - The addition of the Small/Micro Business Enterprise Program (S/MBE) will create additional opportunities for local small business enterprises. Minority Business Enterprises currently certified with DCPS that meet the certification eligibility under the new program will not have to apply to a M/WBE in the new program. However, they will need to reapply once their current certification expires. For more info, please contact Beth Tramel at (904) 858-4860 or Tramelbe@dvulschools.org.

HUD provides stable housing as a platform to improve lives by investing in people and expanding access to education, technology, jobs & healthcare. Section 3 of the program requires that recipients of certain HUD financial assistance, provide job training, employment, & contract opportunities for low or very-low income residents in connection with projects & activities in their neighborhoods.

JEA will be bidding out all of its janitorial & landscaping contracts during the first six months of 2016. These contracted services have been unbundled to offer more contract opportunities for small businesses. Some of these bids will be sheltered for firms participating in the COJ JSEB Program. Each company will be required to become JEA Safety Qualified within ten (10) business days of being notified by JEA that it is a winning bidder. Potential bidders should review the requirements prior to bidding. For more info: https://www.jea.com/About/Procurement/Become\_a\_Vendor/Contractor\_Safety/ or contact Jerry Fulpo at safety@iea.com or (1904) 665-5810.

### CONTACT INFORMATION

#### JAXPORT

Yetunde Oyewole, JSEB Coordinator 904-357-3003

Yetunde.oyewole@jaxport.com

#### **Duval County Public Schools**

Beth Tramel, Supervisor 904-858-4860 Tramelb@duvalschools.org

#### JEA

G. Nadine Carswell, JSEB Manager 904-665-6257 CarsGS@JEA.com

#### SBA

Ken Hamilton, Assistant District Director 904-443-1910 Kenneth hamilton@sba.gov Ken Middleton, Diversity & Equity Program Mgr. 904-598-8728 kmiddleton@itafla.com

Nina Salvaggio, Comm. Outreach Coordinator

#### ...

COJ JSEB

904-255-8834

jseb@coj.net

Evelyn Burton, Vendor Outreach & Compliance 904-741-3667 Evelyn.burton@flyjacksonville.com

### SBA On-Line Government Contract Training January 1-15, 2016

A series of FREE training workshops will be conducted each month during the year. Great opportunity for firms to learn in place (at their own locations) with a live instructor. This activity is funded by the U.S. Small Business Administration & training provided by Stover & Associates, Inc.

#### How it Works:

Just like a class you'd attend in person, courses are taught by a live instructor on a scheduled day and time. From your computer, you'll link to an instructor in a live, real-time, interactive learning experience. You'll become part of a virtual classroom where you can ask questions, seek guidance and participate in class discussions and interactive exercises.

#### For Course Details and to Register:

http://sbaworkshops.stoverteam.com

Workshop information: Phyllis Embree or Chris Strudthoff @ sbaworkshops@stoverteam.com or call at (770) 423-9888. To find your local SBA Office visit: http://business.usa.gov/



# What We Are Doing Now/Future

### JSEB Engagement

**Engaging COJ Leadership and City Council** 

Two JATF City Council Committee Meeting presentations made during 2016

Following up with City Council Members



# What We Are Doing Now/Future

### **JSEB Major Projects**

Septic Tank phase out - \$30M project

JEA is committed to ensuring the vendor workforce is reflective of the community being impacted



# Jacksonville Small & Emerging Business Program

https://www.youtube.com/watch?v=14F\_f0aBRLQ



JEA JSEB SPEND		_ ,	Total Invoiced	FY 16 Goal as	# of	# of	I
OCTOBER 1, 2015	Prime	Sub	as % of	% of	JSEB	JSEB	Total #
through	Contractor	Contractor	Available	Available	Firms	Firms	of JSEB
SEPTEMBER 30, 2016	Invoiced	Invoiced	Spend	Spend	(Prime)	(Sub)	Firms
	=			\$21,160,000			
AA :	= \$674,167	\$1,022,636	\$1,696,803	\$1,481,200	4	3	7
% :	=		8.02%	7.00%			
WBE :	= \$48,578	\$1,211,610	\$1,260,188	\$1,692,800	3	6	9
% :	=		5.96%	8.00%			
HANA :	= \$34,148	\$0	\$34,148	\$846,400	3	0	3
· ·	=		0.16%	4.00%			
OTHER	= \$1,115,182	\$1,051,806	\$2,166,989		5	5	10
202:1202	=			\$21,160,000			
	= \$1,194,545	\$174,844			8	5	13
- T	=		6.47%				
	= \$458,232	\$547,555			8	7	15
•	=		4.75%	8.00%			
	= \$1,257,811	\$165,096	\$1,422,907		8	2	10
, and the second	=		6.72%	4.00%			
OTHER :	= \$614,929	\$157,204	\$772,133		6	4	10
Supplies :				*2 522 222			
	=	d o	40	\$3,680,000		0	
AA % :	\$0	\$0	\$0	\$257,600	0	0	0
		å2 404	0.00%		5	1	6
	= \$205,353 =	\$3,484	\$208,837 5.67%		5	1	6
	- =   \$0	\$45,687	\$45,687		0	1	1
	=	\$45,007	1.24%	4.00%	U		
	=   \$0	\$0	\$0		0	0	0
8	- φυ	ŞΟ	Ųθ				
<u> </u>							
Total :	=			\$46,000,000			
	= \$1,868,712	\$1,197,480	\$3,066,193		12	8	20
	=	7 = 7 = 2 . 7 100	6.67%	7.00%		J	
	= \$712,163	\$1,762,648	\$2,474,812		16	14	30
	=	7=7.02,010	5.38%				
HANA	= \$1,291,959	\$210,783	\$1,502,742		11	3	14
	=	, , ,	3.27%	4.00%	_	-	
OTHER :	= \$1,730,112	\$1,209,010			11	9	20
			· · · · · · · · · · · · · · · · · · ·				1
Summary Total	= \$5,602,947	\$4,379,922	\$9,982,869	\$9,660,000	50	34	84
% :	=		21.70%				

Prime Vendor Names	MBE Code	JSEB	TYPE	Invoice Amount
A NORMAN FENCE CO INC	AA	YES	CONSTRUCTION	\$13,665.00
H TRENT ELSON UNDERGROUND SPRINKLER SYS	AA	YES	CONSTRUCTION	\$629,350.13
H TRENT ELSON UNDERGROUND	AA	YES	CONSTRUCTION	\$16,891.62
MCCLENDONS PORTABLE TOILETS INC	AA	YES	CONSTRUCTION	\$1,560.00
MCCLENDONS PORTABLE TOILETS INC	AA	YES	CONSTRUCTION	\$1,169.00
THE ROSE GROUP	AA	YES	CONSTRUCTION	\$11,531.63
			Subtotal	\$674,167.38
AQUINO CONSTRUCTION	AI	YES	CONSTRUCTION	\$3,300.00
PARS CONSTRUCTION	AI	YES	CONSTRUCTION	\$2,400.00
			Subtotal	\$5,700.00
ARKEST LLC	HA	YES	CONSTRUCTION	\$28,448.33
			Subtotal	\$28,448.33
M & J STRIPING INC	WBE	YES	CONSTRUCTION	\$3,721.50
MAIN STREET SITE & UTILITY, LLC	WBE	YES	CONSTRUCTION	\$23,093.90
SOUTHEASTERN STAINLESS FABRICATORS, INC	WBE	YES	CONSTRUCTION	\$21,762.97
			Subtotal	\$48,578.37
ALL PRO ASPHALT	OTHER	YES	CONSTRUCTION	\$28,363.76
AMERICAN CONSTRUCTION ENTERPRISES OF NE	OTHER	YES	CONSTRUCTION	\$271,507.35
AMERICAN CONSTRUCTION ENTERPRISES OF NE	OTHER	YES	CONSTRUCTION	\$95,651.56
COMPLETE COATINGS INC	OTHER	YES	CONSTRUCTION	\$116,508.00
COMPLETE COATINGS INC	OTHER	YES	CONSTRUCTION	\$62,935.00
COMPLETE SERVICES WELL DRILING INC	OTHER	YES	CONSTRUCTION	\$468,093.78
COMPLETE SERVICES WELL DRILING INC	OTHER	YES	CONSTRUCTION	\$40,250.00
COUNTRY BOY FENCE	OTHER	YES	CONSTRUCTION	\$31,873.00
			Subtotal	\$1,115,182.45
			Total Construction	\$1,872,076.53
BABYBOYY PRODUCTIONS	AA	YES	SERVICES	\$27,225.00
BALDWIN'S QUALITY PLUMBING	AA	YES	SERVICES	\$273,030.81
CIVIL SERVICES INC	AA	YES	SERVICES	\$2,700.00
EVERSAFE BUILDING MAINTENANCE CORP.	AA	YES	SERVICES	\$544,292.36
FLEET PRESSURE WASHING INC	AA	YES	SERVICES	\$58,503.00
FLEET PRESSURE WASHING INC	AA	YES	SERVICES	\$997.00
MISTER GENE CLEAN JANITORIAL SERVICES	AA	YES	SERVICES	\$108,540.00
PETERS AND YAFFEE, INC.	AA	YES	SERVICES	\$29,945.50
WATAKE, INC	AA	YES	SERVICES	\$149,311.43
			Subtotal	\$1,194,545.10
ADVANCED TECHNOLOGY MANAGEMENT, INC	AI	YES	SERVICES	\$158,487.06
ENG ENGINEERING INC	AI	YES	SERVICES	\$51,176.82
I-TECH RESOURCES INC	AI	YES	SERVICES	\$552,499.96
SGS TECHNOLOGIE, LLC	AI	YES	SERVICES	\$320,574.75
TTV ARCHITECTS	AI	YES	SERVICES	\$49,647.00

VIA CONCEPTS, LLC	AI	YES	SERVICES	\$5,500.00
			Subtotal	\$1,137,885.59
PQH ARCHITECTS INC	HA	YES	SERVICES	\$62,765.00
			Subtotal	\$62,765.00
ALMOND ENGINEERING PA	WBE	YES	SERVICES	\$105,061.48
C&L LANDSCAPE, INC.	WBE	YES	SERVICES	\$55,124.49
C&L LANDSCAPE, INC.	WBE	YES	SERVICES	\$40,764.30
EAGLE LAWN CARE OF N. E. FLORIDA, INC.	WBE	YES	SERVICES	\$119,664.50
ENVIRONMENTAL RESOURCE SOLUTION INC	WBE	YES	SERVICES	\$3,558.50
FOUR WATERS ENGINEERING INC	WBE	YES	SERVICES	\$37,528.50
INTRON TECHNOLOGIES, INC.	WBE	YES	SERVICES	\$47,665.00
MESKEL & ASSOCIATES ENGINEERING PLLC	WBE	YES	SERVICES	\$37,615.00
MICHAEL LLOYD HAULING INC	WBE	YES	SERVICES	\$11,250.00
			Subtotal	\$458,231.77
JOHN R BARNARD & ASSOCIATES	NA	YES	SERVICES	\$57,160.00
			Subtotal	\$57,160.00
EVANS BROTHERS MAINTENANCE AND SRVS	OTHER	YES	SERVICES	\$66,618.00
J COLLINS ENGINEERING ASSOCIATES	OTHER	YES	SERVICES	\$365,127.75
JACKSONVILLE LAWN CARE INC	OTHER	YES	SERVICES	\$37,932.25
JOHNSON SURVEYING AND MAPPING	OTHER	YES	SERVICES	\$32,080.00
MECHLING ENGINEERING & CONSULTING INC	OTHER	YES	SERVICES	\$111,691.33
R E HOLLAND& ASSOCIATES INC	OTHER	YES	SERVICES	\$1,480.00
			Subtotal	\$614,929.33
			Total Services	\$3,525,516.79
AMERICAN RAG & WIPERS	WBE	YES	SUPPLIES	\$33,579.00
FIRST COAST INDUSTRIAL SUPPLY	WBE	YES	SUPPLIES	\$10,304.55
FIRST COAST INDUSTRIAL SUPPLY	WBE	YES	SUPPLIES	\$4,095.50
INDCOM SALES AND SERVICES	WBE	YES	SUPPLIES	\$6,377.43
MACS INDUSTRIAL SUPPLY	WBE	YES	SUPPLIES	\$15,335.99
MACS INDUSTRIAL SUPPLY	WBE	YES	SUPPLIES	\$123,530.53
SHIMP SIGN AND DESIGN INC	WBE	YES	SUPPLIES	\$8,298.51
SHIMP SIGN AND DESIGN INC	WBE	YES	SUPPLIES	\$3,831.77
			Subtotal	\$205,353.28
			Total Supplies	\$205,353.28

Project	Award Date	Contractor	Sub (S)	Prime Award Amount	JSEB Goal	Total
		CH2M HILL	P	\$4,254,695.00		
023-06 - Blacksford WWTP Expansion		Almond Engineering	S			\$12,605.63
005.44.5	1/13/2011	FRED WILSON & ASSOCIAT	Р	\$1,750,000.00		
005-11-Engineering Services - Electric	3 YRS	Meskel & Associates Engine	S			\$4,470.00
Transmission and Substation Projects		Peacock Consulting (3%)	S			
					Sneiter-	
	2/12/2012	Dickinson Fleet Services	P	\$16,422,729.00	Portering	
098-11-Mobile Fleet Maintenance Services		<b>Environmental Remediatio</b>				\$5,670.00
	5 yrs	Gorman Trucking (backup)				
		Mc-N-Law Trucking (backu	S			
	12/15/2011	WARREN ASPHALT INC	P	\$6,000,000.00	6%	
	3 YRS	All Pro Asphalt	S			\$32,859.23
	3 1 1 3	National Tire Solutions	S			\$7,395.65
127-11-Restore Disturbed Asphalt Paved Areas	1 YR Renewal	Benefits Unl	S			
	1/15/2015	D.J. Contracting of Jackson	S			\$11,751.25
		Donna Hamilton 2%	S			\$227,161.68
		M & J Striping 1%	S			\$4,916.70
	10/4/2012	St. Johns & Partners	Р	\$10,098,000.00	10%	
091-12-Public Education Campaign	extension 9/8/16	Armstrong Dosign Group d	c			\$85,898.00
	3/8/10	Armstrong Design Group d,	3			\$85,898.00
		Trees, Inc.	D	\$5,613,240.00		
			S	\$3,013,240.00		\$302,573.85
MPA-0093 - Vegetation Management	1/31/2013	Johnson Surveying	ა ი			\$73,764.50
		, ,	S			\$35,947.10
		Bug Pro Florida (spraying)	3			\$35,947.10
OCT 12 On an Blanket Facilities Landscane		LO D Maintanana	P			
067-13 Open Market Facilities Landscape		J G D Widinterlance	P			¢122.004.61
Maintenance		Jennie E Moore LLC				\$132,804.61
		MANAL Cov.	P	¢0,000,000,00	5%	
			•	\$8,000,000.00	370	
010 14 Company Comptens the Comptens	C /2C /204 4		S			
010-14 General Construction Services	6/26/2014	, ,	S		-	
		0	S		-	624 005 00
		Complete Coatings	S			\$21,885.00

	1	Williams Industrial Service	P	\$8,000,000.00	5%	
			S	1 - 7 7		
			S			\$186,537.50
			S			7-00/001101
010-14 General Construction Services	6/26/2014	McClendons Portable Toile	S			\$16,256.93
	0, 20, 201 :	A C Concrete	S			\$6,421.00
			S			\$3,483.75
			S			\$8,202.50
			S			\$51,500.00
						70 = ,000000
		Randstad North America, I	P	\$6,653,086.30	20%	
	3/27/2014	Visual Solutions, Inc	S	φο/σσο/σσοίσσ	6%	
030-14 Technology Services - Professional	3,27,202	Harvest Software Solutions	S		5%	
and Technical Resources	C/O 7/16/15 -	Synergy Software Solutions	_		5%	
and recimical nesources		I-TECH Personnel	<u>s</u>		2.5%	\$137,567.96
	\$ <del>4</del> ,000,000	DAK Resources	S		2.5%	Ψ137,307.30
		Drik Nesources			2.575	
					Ορτ. w/	
	11/6/2014	CDM Smith	Р	\$855,227.00	criterion	
050-14 Engineering Services For Mandarin		J Collins Engineering	S	. ,	4%	\$11,250.00
WRF Reuse System Modifications		Meskel & Associates	S		3%	. ,
Will Rease system Mounications		Landwise Design	S		1%	\$4,510.00
		RE Holland and Associates	S		2%	\$11,175.00
						. ,
		CH2M HILL	P	\$390,783.00		
101-14 Biosolids Management Study	9/3/2015	J Collins Engineering	S	. ,	\$9,800	
,	1,1,		S		\$9,800	\$18,951.15
		ů č				. ,
103-14 Managed Services for Helpdesk and		Emtec, Inc.	P	\$726,120.00		
PC Support Services Technicians	11/20/2014		S	. ,	10%	\$27,528.00
		,				. ,
		CH2M HILL	P	\$896,065.00		
		Meskel & Associates Engine	S	, ,	2%	
			S		2%	
114-14 Northwest Regional WTP	1/15/2015	Almond Engineering				\$18,755.10
			S		0.5%	\$125.00
			<u>S</u>		0.5%	Ψ123.00
			-			
		CH2M HILL	P	\$4,120,215.00		
017-15 Fairfax & McDuff WTP Wellfield		Complete Services	<u>'</u> S	+ -,2=0,=20.00	20%	\$561,769.50
Rehab	6/11/2015		<u>S</u>		1%	7501,705.50
IIdu	ŀ		S		1%	
		it larson & associates	`			

021-15 Cecil Commerce Center North		Reliable Substation Service	Р	\$5,230,000.00		
Substation and Transmission Circuits	1/23/2015	Vallencourt Inc.	S	. , ,	24.5%	\$303,583.47
						, ,
		Henkels & McCoy	P	\$21,000,000.00	3.0%	
022-15 Underground Distribution Facilities		ABC Cutting Contractors	S	, ,	0.5%	
& Manhole Ductbank Unit Price	8/6/2015	Meskel & Associates	S		0.5%	\$1,540.00
Construction & Maintenance		Landscape Construction	S		2.0%	\$52,215.00
028-15 Repair and Installation of Security	4/22/2045	Armstrong Fence Co.	Р	\$2,529,540.00		
Fencing	1/23/2015	The Goodly Group of North	S		10%	\$50,242.80
087-15 Engineering Services Force Main	11/12/2015	England Thims & Miller	Р	\$374,910.00	Eval Criterion	
from Key Haven Blvd to Lem Turner	, ,	CSI Geo, Inc.	S		8%	\$22,884.00
102-15 T-Line to Busch Dr - Trans - New -	3/3/2016	Jacobs Engineering	Р	\$580,203.50	Eval Criterion	
FIVI		CSI Geo	S		\$84,663.50	\$6,588.00
108-15 Jaxport Substation Installation	10/8/2015	Reliable Substation Service	Р	\$698,000.00	6%	
	10/8/2015	Vallencourt	S		\$180,600	\$180,624.16
117-15 MandarinWRF Projects Bio Filter		WPC Industrial Contractor	Р	\$5,115,700.00		
Bed Replacement Headworks	9/24/2015	ABC Cutting Contractors	S			\$1,200.00
Rahabilitation Bar Screen Replacement and		Complete Coatings	S		5%	\$31,150.00
	12/10/2015	C & C Powerline	Р	\$1,897,561.00	9%	
010-16 Brandy Branch T1 Addition		Vallencourt Construction	S		14%	\$123,456.13
		Johnson Survey	S		1%	\$3,300.00
016-16 Key Haven to Harts Rd.	2/25/2016	Callaway Contracting	Р	\$1,636,503.15	7%	
Replacement	_,,	All Pro Asphalt	S		8%	\$40,052.96
				1.2.2.2.2	COV	
017-16 Mandarin Road Repairs	11/12/2015	Callaway Contracting	Р	\$431,007.35	6%	
·		All Pro Asphalt	S		13%	\$63,157.77
		I Danistan	D	¢7.400.000.00	E9/	
021-16 Roofing Installations and Repair	3/3/2016	J Register	Р	\$7,190,000.00	5% 5%	¢06 F27 76
<u> </u>		Overstreet & Associates	S		5%	\$86,537.76
		DCI Cometweeting Inc	P	¢55 245 727 00	8%	
		PCL Construction Inc	S S	\$55,215,737.00	\$191,500	¢24.277.00
020 4C Blocks Found M/DE Block 4 Ferry	2/18/2016	R E Holland	_		\$191,500	\$34,277.00
028-16 Blacks Ford WRF Phase 4 Expansion		Tillman Building Services	S		\$3,550,767	¢000 050 00
		Xeye ITG Global	S		\$500,000	\$999,958.00
		i i d diobai	3		بابارانان	

		Sawcross Inc.	Р	\$5,777,000.00	6%	
030-16 Greenland WTP Ozone	2/40/2046	All Pro Asphalt	S		0.43%	
Improvement Project	2/18/2016	Demetrius Shack's Painting	S		0.38%	
		JB Materials	S		5.40%	\$45,687.46
		Smith McCrary Architects	Р	\$207,000.00		
042 46 Bushman New Administrative		Meskel Engineering	S		2.7%	\$8,059.43
042-16 Buckman New Administrative	5/19/2016	Gina Hill	S		11.6%	\$3,339.00
Building		R E Holland	S		5.2%	\$10,600.00
		C&ES Consultants	S		12.8%	\$3,561.60
		Warren's Asphalt	Р	\$11,868,359.46	10%	
050-16 Restore Disturbed Asphalt Paved	6/9/2016	Donna Hamilton	S		10%	\$129,271.28
<u>'</u>		DJ Contracting	S		5%	\$12,139.06
Areas		M & J Striping				\$2,000.00
		National Tire	S		1%	\$1,113.40
		WPC Industrial	Р	\$4,842,000.00	6%	
OCA 16 Mandavin M/DE Faulaization Tank	F/10/2016	Hager Construction	S		4%	\$59,726.59
064-16 Mandarin WRF Equlaization Tank	5/19/2016	ABC Cutting Contractors	S		1.5%	\$1,967.50
		Landscape Construction	S		0.7%	
081-16 Arlington East Water Reclamation		Ortega Industrial Contract	Р	\$15,379,578.50	3%	
Facility Secondary Clarifier	8/25/2016	R E Holland	S			
racinty Secondary Clariner		Donna Hamilton	S			
087-16 Nocatee North Reclaimed Water		Petticoat Schmitt	Р	\$3,122,069.00	2%	
Storage Expansion and Bratram Reuse	6/16/2016	Donna J Hamilton Inc	S		\$57,000.00	\$45,811.75
Water Storage Expansion		DJ Contracting	S		\$6,000.00	\$32,141.57
					Total	64 270 022 20

Total \$4,379,922.28

Vendor	MBE/WBE Code	Invoice Amount
AA BOTTLED GAS AND FUEL	WBE	\$916.76
ABC LASER USA	Al	\$5,539.00
ACCUTECH INSTRUMENTATION	WBE	\$3,654.87
ACME BARRICADES	WBE	\$346.71
AEROSTAR ENVIRONMENTAL SERVICES INC	WBE	\$9,052.03
A-JAX COMPANY	AP	\$93,654.09
ALL PRO TRAILERS - JACKSONVILLE	WBE	\$54.90
ALLEN'S CULVERTS, INC	WBE	\$4,995.00
ALRO STEEL CORPORATION	WBE	\$222.00
AMERICAN WOOD FIBERS INC	WBE	\$2,367.51
APPLIED SPECIALTIES INC	WBE	\$32,720.50
ARROYO PROCESS EQUIPMENT INC	HA	\$2,286.52
ARWOOD WASTE INC	NA	\$11,569.02
ATCO MANUFACTURING COMPAN	NA	\$14,779.16
AVANTI COMPANY	WBE	\$1,065.60
BENNETT'S ACE HARDWARE	WBE	\$16.95
BENNETT'S POWER EQUIPMENT	WBE	\$400.27
CAMAC VALVES & CONTROLS	HI	\$24,264.98
CAROLINA BIOLOGICAL SUPPLY	WBE	\$700.92
CARUS CORPORATION	WBE	\$2,313.24
CCS PRESENTATION SYSTEM	WBE	\$3,326.75
COMPLIANCE SIGNS.COM	WBE	\$172.00
CONSTRUCTION MANAGEMENT TECHNICAL SERVICES	AA	\$10,460.42
COPYTRONICS	WBE	\$2,093.20
CORNERSTONE SUPPLY	WBE	\$1,598.41
COUNTRY INN & SUITES	WBE	\$660.00
CRESENT CHEMICAL CO	WBE	\$457.94
DARRELL HANNA & ASSOCIATES	WBE	\$90.58
DG CUSTOM GOLF	WBE	\$230.00
DOLPHIN BACKFLOW INC	WBE	\$350.00
DUSTSTOP FILTERS	WBE	\$201.90
DUVAL ELECTRICAL AND B	HI	\$8,427.00
EASTERN INDUSTRIAL SUPPLI	HI	\$230,696.68
EASTERN TECHNICAL ASSOC	WBE	\$300.00
EATON ELECTRICAL	WBE	\$4,825.00
EB 29TH ANNUAL MARTIN	WBE	\$800.00
EH WACHS	WBE	\$3,114.60
EJCON CORPORATION	HI	\$650.00
ELECTRICMOTORWHOLESALE	WBE	\$2,110.55
EUROPEAN STREET CAFE BCH	WBE	\$108.54

FASTSIGNS FERBER SHEET METAL WORK WBE \$2,930.8; FERBERS HEET METAL WORK WBE \$8,660.00 FERGUSON ENTERPRISES #25 HII \$428.3; FIBERTRONICS WBE \$1,025.4; FILING SOURCE WBE \$242.5; FILEOUIPMENT SERVICE WBE \$3307.4; FILORIDA BEARINGS INC 4 HII \$11,930.01 FILUID COMPONENTS USA WBE \$182.5; FORESTRY SUPPLIERS WBE \$3,518.9; FORT BEND SERVICES, INC WBE \$3,518.9; FORT BEND SERVICES, INC WBE \$3,518.9; FORT BEND SERVICES, INC WBE \$3,518.9; GEORGE A, ISRAEL JR., INC WBE \$1,186.4; GOLF & ELECTRIC VEHICLES WBE \$5,633.0; GORDON ELECTRIC SUPPLY WBE \$2,338.6; GORDON ELECTRIC SUPPLY WBE \$2,338.6; HARBOR FREIGHT TOOLS 107 WBE \$1,375.6; HARBOR FREIGHT TOOLS 107 WBE \$1,375.6; HUDSON PUMP & EQUIPMENT A WBE \$11,24.8; HY-TECH SALES INC WBE \$11,25.8; WBE \$1,25.9; WBE \$1,26.7; WBE \$2,26	EXPRESS MOWER PARTS	WBE	\$872.15
FERBER SHEET METAL WORK FERGUSON ENTERPRISES #25 HI S\$428.31 FIBERTRONICS WBE \$1,025.43 FILING SOURCE WBE \$3426.31 FIBERTRONICS WBE \$3426.31 FIBERTRONICS WBE \$3426.31 FIBERTRONICS WBE \$3407.44 FILING SOURCE FILING SOURCE FILING SOURCE WBE \$3407.44 FILING SOURCE FORE STRY SUPPLIERS WBE \$3426.31 FORE STRY SUPPLIERS WBE \$3426.31 FORE STRY SUPPLIERS FORE STRY SUPPLIERS WBE \$3426.33 FORE STRY SUPPLIES WBE \$3426.33 FORE STRY SUPP	F R ALEMAN & ASSOCIATES INC	HA	\$7,420.00
FERGUSON ENTERPRISES #25  FILERTRONICS  WBE  \$1.025	FASTSIGNS	WBE	\$2,930.82
FIBERTRONICS	FERBER SHEET METAL WORK	WBE	\$8,660.00
FILING SOURCE FILEQUIPMENT SERVICE FORESTRY SUPPLIERS FO	FERGUSON ENTERPRISES #25	HI	\$428.37
FLEQUIPMENT SERVICE	FIBERTRONICS	WBE	\$1,025.43
FLORIDA BEARINGS INC 4	FILING SOURCE	WBE	\$242.50
FLUID COMPONENTS USA	FL EQUIPMENT SERVICE	WBE	\$307.44
FORESTRY SUPPLIERS FORT BEND SERVICES, INC WBE \$3,266.00 WBE \$1,186.44 GEORGE A. ISRAEL JR., INC WBE \$1,349.21 GOLF & ELECTRIC VEHICLES WBE \$5,633.00 GORDON ELECTRIC SUPPLY WBE \$2,338.56 GRAPHIC PRODUCTS INC WBE \$1,049.66 HARBOR FREIGHT TOOLS 107 WBE \$1,375.66 HUDSON PUMP & EQUIPMENT A WBE \$11,124.86 HY-TECH SALES INC WBE \$125.99 INTERNATIONAL INSTITUTE WBE \$125.99 INTERNATIONAL INSTITUTE WBE \$115.30 JO-KELL, INC WBE \$115.30 JO-KELL, INC WBE \$10,06.22 KATY EQUIPMENT HI \$2,096.76 KSI WBE \$308,985.86 WBE \$308,985.86 LECO CORPORATION WBE \$26,703.22 LECTRALOCK INC WBE \$323.29 LECTRALOCK INC WBE \$323.29 LECTRALOCK INC WBE \$333.39 LECTRALOCK INC WBE \$336.965.46 WBE \$375.00 MAC PAPERS INC WBE \$375.00 MAC PAPERS INC WBE \$375.00 MAGNETROL WBE \$375.00 MILLER BEARINGS JACKSONVI WBE \$310.80 MILLER BEARINGS JACKSONVI	FLORIDA BEARINGS INC 4		\$11,930.00
FORT BEND SERVICES, INC  FREELIN-WADE CO  GEORGE A. ISRAEL JR., INC  GOLF & ELECTRIC VEHICLES  GOLF & ELECTRIC VEHICLES  GORDON ELECTRIC SUPPLY  WBE  S2,338.56  GORDON ELECTRIC SUPPLY  WBE  GRAPHIC PRODUCTS INC  WBE  S1,375.66  HARBOR FREIGHT TOOLS 107  WBE  WBE  S973.56  HERCULES  WBE  WBE  S973.56  HUDSON PUMP & EQUIPMENT A  WBE  WBE  WBE  S11,124.86  HY-TECH SALES INC  WBE  S229.37  INTERNATIONAL INSTITUTE  WBE  S115.30  J WALKER TRUCKING INC  AA  S82,285.00  JO-KELL, INC  WBE  S110.30  JOSEPH'S ITTALIAN PIZZA  WBE  S10.90  KATY EQUIPMENT  HI  S2,096.77  KSI  WBE  S10.30  WBE  S26,703.20  LECTRALOCK INC  WBE  S26,703.20  MAC PAPERS INC  WBE  S26,703.20  MAC PAPERS INC  WBE  S76,95.44  MADDEN AIRE INC  WBE  S76,95.44  MAGNETROL  WBE  S76,95.44  MACGRAW-HILL PLATTS  WBE  S28,444  WBE  S28,444  WBE  S28,444  WBE  S28,444  MILLER BEARINGS JACKSONVI  WBE  S10.00  MILLER BEARINGS JACKSONVI	FLUID COMPONENTS USA	WBE	\$182.58
FREELIN-WADE CO  GEORGE A. ISRAEL JR., INC  GEORGE A. ISRAEL JR., INC  WBE  \$1,349,27  GOLF & ELECTRIC VEHICLES  WBE  \$5,633.03  GORDON ELECTRIC SUPPLY  WBE  \$2,338.56  GRAPHIC PRODUCTS INC  WBE  \$1,049.61  HARBOR FREIGHT TOOLS 107  WBE  \$1,375.64  WBE  \$1,375.64  WBE  \$1,375.64  WBE  \$1,375.64  WBE  \$1,375.64  WBE  \$1,174.84  WBE  \$11,124.84  HY-TECH SALES INC  WBE  \$11,124.84  WBE  \$11,124.84  WBE  \$11,124.86  WBE  \$10,040  WBE  \$11,7859,140  WB	FORESTRY SUPPLIERS	WBE	\$3,518.96
GEORGE A. ISRAEL JR., INC  GOLF & ELECTRIC VEHICLES  GOLF & ELECTRIC VEHICLES  GORDON ELECTRIC SUPPLY  WBE  \$5,633.05 GORDON ELECTRIC SUPPLY  WBE  \$2,338.55 GRAPHIC PRODUCTS INC  WBE  \$1,049.65 HARBOR FREIGHT TOOLS 107  WBE  \$1,375.64 HARBOR FREIGHT TOOLS 107  WBE  \$1,375.64 HERCULES  WBE  \$3,973.55 HUDSON PUMP & EQUIPMENT A  WBE  \$11,124.84 HY-TECH SALES INC  WBE  \$11,124.84 HY-TECH SALES INC  WBE  \$121.56 IRA'S A-1 TROPHIES  WBE  \$1115.30 INTERNATIONAL INSTITUTE  WBE  \$1,153.34 INTERNATIONAL INSTITUTE  WBE  \$1,153.34 INTERNATIONAL INSTITUTE  WBE  \$1,096.27 KATY EQUIPMENT  WBE  \$1,096.27 KATY EQUIPMENT  WBE  \$303.9,985.84 LAINE INDUSTRIES INC  WBE  \$303.9,985.84 LAINE INDUSTRIES INC  WBE  \$26,703.26 LECO CORPORATION  WBE  \$2,332.96 LECTRALOCK INC  WBE  \$333.96 LYNDA.COM  WBE  \$375.00 MAC PAPERS INC  WBE  \$375.00 MAC	FORT BEND SERVICES, INC	WBE	\$3,266.00
GOLF & ELECTRIC VEHICLES         WBE         \$5,633.05           GORDON ELECTRIC SUPPLY         WBE         \$2,338.56           GRAPHIC PRODUCTS INC         WBE         \$1,049.66           HARBOR FREIGHT TOOLS 107         WBE         \$1,375.64           HERCULES         WBE         \$973.55           HERCULES         WBE         \$11,124.86           HUDSON PUMP & EQUIPMENT A         WBE         \$259.96           HY-TECH SALES INC         WBE         \$259.96           INTERNATIONAL INSTITUTE         WBE         \$121.50           IRA'S A-1 TROPHIES         WBE         \$115.31           JO-KELL, INC         AA         \$82,285.00           JO-KELL, INC         WBE         \$426,413.42           JOSEPH'S ITALIAN PIZZA         WBE         \$1,096.23           KATY EQUIPMENT         HI         \$2,096.76           KSI         WBE         \$308,985.86           LAINE INDUSTRIES INC         WBE         \$26,703.21           LECO CORPORATION         WBE         \$26,703.21           LECO CORPORATION         WBE         \$332.93           LECTRALOCK INC         WBE         \$365.00           LUDECA INC         WBE         \$375.00           MAC P	FREELIN-WADE CO	WBE	\$1,186.46
GORDON ELECTRIC SUPPLY         WBE         \$2,338.50           GRAPHIC PRODUCTS INC         WBE         \$1,049.61           HARBOR FREIGHT TOOLS 107         WBE         \$1,375.64           HERCULES         WBE         \$973.51           HUDSON PUMP & EQUIPMENT A         WBE         \$11,124.84           HY-TECH SALES INC         WBE         \$259.95           INTERNATIONAL INSTITUTE         WBE         \$121.53           IRA'S A-1 TROPHIES         WBE         \$115.30           JWALKER TRUCKING INC         AA         \$82,285.00           JO-KELL, INC         WBE         \$426,413.42           JOSEPH'S ITALIAN PIZZA         WBE         \$1.096.76           KATY EQUIPMENT         HI         \$2,096.76           KSI         WBE         \$308,985.84           LAINE INDUSTRIES INC         WBE         \$233.22           LECO CORPORATION         WBE         \$2,332.22           LECO CORPORATION         WBE         \$2,332.22           LECTRALOCK INC         WBE         \$2,332.22           LUDECA INC         WBE         \$375.00           MAC PAPERS INC         WBE         \$375.00           MAC PAPERS INC         WBE         \$7,695.40           M	GEORGE A. ISRAEL JR., INC		\$1,349.20
GRAPHIC PRODUCTS INC         WBE         \$1,049.67           HARBOR FREIGHT TOOLS 107         WBE         \$1,375.6           HERCULES         WBE         \$973.50           HUDSON PUMP & EQUIPMENT A         WBE         \$11,124.84           HY-TECH SALES INC         WBE         \$259.99           INTERNATIONAL INSTITUTE         WBE         \$121.50           IRA'S A-1 TROPHIES         WBE         \$115.34           JOWALKER TRUCKING INC         AA         \$82,285.00           JO-KELL, INC         WBE         \$426,413.4           JOSEPH'S ITALIAN PIZZA         WBE         \$1,096.25           KATY EQUIPMENT         HI         \$2,096.76           KSI         WBE         \$308,985.8           LECO CORPORATION         WBE         \$308,985.8           LECTO CORPORATION         WBE         \$2,332.93           LECTRALOCK INC         WBE         \$2,332.93           LECTRALOCK INC         WBE         \$333.93           LYNDA.COM         WBE         \$3795.00           MAC PAPERS INC         WBE         \$3795.00           MAC PAPERS INC         WBE         \$795.04           MAC PAPERS INC         WBE         \$795.04           MAC PAPERS INC <td>GOLF &amp; ELECTRIC VEHICLES</td> <td>WBE</td> <td>\$5,633.09</td>	GOLF & ELECTRIC VEHICLES	WBE	\$5,633.09
HARBOR FREIGHT TOOLS 107	GORDON ELECTRIC SUPPLY	WBE	\$2,338.50
HERCULES	GRAPHIC PRODUCTS INC		\$1,049.67
HUDSON PUMP & EQUIPMENT A   WBE	HARBOR FREIGHT TOOLS 107	WBE	\$1,375.64
HY-TECH SALES INC   WBE   \$259.98	HERCULES	WBE	\$973.50
INTERNATIONAL INSTITUTE			\$11,124.84
RA'S A-1 TROPHIES			\$259.98
J. WALKER TRUCKING INC			\$121.50
JO-KELL, INC			\$115.30
STATE   STALIAN PIZZA			\$82,285.00
KATY EQUIPMENT       HI       \$2,096.76         KSI       WBE       \$308,985.84         LAINE INDUSTRIES INC       WBE       \$26,703.26         LECO CORPORATION       WBE       \$2,332.93         LECTRALOCK INC       WBE       \$19.22         LUDECA INC       WBE       \$833.96         LYNDA.COM       WBE       \$375.00         MAC PAPERS INC       WBE       \$7,695.46         MADDEN AIRE INC       WBE       \$795.00         MAGNETROL       WBE       \$17,859.15         MAKE BELIEVE COSTUMES & D       WBE       \$105.00         MB - JACKSONVILLE       WBE       \$2,150.00         MCGRAW-HILL PLATTS       WBE       \$2,150.00         MILLER BEARINGS JACKSONVI       WBE       \$10.86			\$426,413.42
KSI         WBE         \$308,985.84           LAINE INDUSTRIES INC         WBE         \$26,703.26           LECO CORPORATION         WBE         \$2,332.93           LECTRALOCK INC         WBE         \$19.22           LUDECA INC         WBE         \$833.96           LYNDA.COM         WBE         \$375.00           MAC PAPERS INC         WBE         \$7,695.46           MADDEN AIRE INC         WBE         \$795.00           MAGNETROL         WBE         \$17,859.15           MAKE BELIEVE COSTUMES & D         WBE         \$105.00           MB - JACKSONVILLE         WBE         \$284.46           MCGRAW-HILL PLATTS         WBE         \$2,150.00           MILLER BEARINGS JACKSONVI         WBE         \$10.86			\$1,096.23
LAINE INDUSTRIES INC         WBE         \$26,703.26           LECO CORPORATION         WBE         \$2,332.93           LECTRALOCK INC         WBE         \$19.27           LUDECA INC         WBE         \$833.96           LYNDA.COM         WBE         \$375.00           MAC PAPERS INC         WBE         \$7,695.46           MADDEN AIRE INC         WBE         \$795.00           MAGNETROL         WBE         \$17,859.15           MAKE BELIEVE COSTUMES & D         WBE         \$105.00           MB - JACKSONVILLE         WBE         \$284.46           MCGRAW-HILL PLATTS         WBE         \$2,150.00           MILLER BEARINGS JACKSONVI         WBE         \$10.86			\$2,096.76
LECO CORPORATION         WBE         \$2,332.93           LECTRALOCK INC         WBE         \$19.22           LUDECA INC         WBE         \$833.98           LYNDA.COM         WBE         \$375.00           MAC PAPERS INC         WBE         \$7,695.48           MADDEN AIRE INC         WBE         \$795.00           MAGNETROL         WBE         \$17,859.19           MAKE BELIEVE COSTUMES & D         WBE         \$105.00           MB - JACKSONVILLE         WBE         \$284.48           MCGRAW-HILL PLATTS         WBE         \$2,150.00           MILLER BEARINGS JACKSONVI         WBE         \$10.88	KSI		\$308,985.84
LECTRALOCK INC         WBE         \$19.2°           LUDECA INC         WBE         \$833.98           LYNDA.COM         WBE         \$375.00           MAC PAPERS INC         WBE         \$7,695.48           MADDEN AIRE INC         WBE         \$795.00           MAGNETROL         WBE         \$17,859.18           MAKE BELIEVE COSTUMES & D         WBE         \$105.00           MB - JACKSONVILLE         WBE         \$284.48           MCGRAW-HILL PLATTS         WBE         \$2,150.00           MILLER BEARINGS JACKSONVI         WBE         \$10.88			\$26,703.28
LUDECA INC         WBE         \$833.98           LYNDA.COM         WBE         \$375.00           MAC PAPERS INC         WBE         \$7,695.48           MADDEN AIRE INC         WBE         \$795.00           MAGNETROL         WBE         \$17,859.15           MAKE BELIEVE COSTUMES & D         WBE         \$105.00           MB - JACKSONVILLE         WBE         \$284.48           MCGRAW-HILL PLATTS         WBE         \$2,150.00           MILLER BEARINGS JACKSONVI         WBE         \$10.88			\$2,332.93
LYNDA.COM         WBE         \$375.00           MAC PAPERS INC         WBE         \$7,695.48           MADDEN AIRE INC         WBE         \$795.00           MAGNETROL         WBE         \$17,859.18           MAKE BELIEVE COSTUMES & D         WBE         \$105.00           MB - JACKSONVILLE         WBE         \$284.48           MCGRAW-HILL PLATTS         WBE         \$2,150.00           MILLER BEARINGS JACKSONVI         WBE         \$10.88			\$19.21
MAC PAPERS INC         WBE         \$7,695.46           MADDEN AIRE INC         WBE         \$795.00           MAGNETROL         WBE         \$17,859.15           MAKE BELIEVE COSTUMES & D         WBE         \$105.00           MB - JACKSONVILLE         WBE         \$284.46           MCGRAW-HILL PLATTS         WBE         \$2,150.00           MILLER BEARINGS JACKSONVI         WBE         \$10.86			\$833.98
MADDEN AIRE INC         WBE         \$795.00           MAGNETROL         WBE         \$17,859.15           MAKE BELIEVE COSTUMES & D         WBE         \$105.00           MB - JACKSONVILLE         WBE         \$284.45           MCGRAW-HILL PLATTS         WBE         \$2,150.00           MILLER BEARINGS JACKSONVI         WBE         \$10.85			\$375.00
MAGNETROL         WBE         \$17,859.15           MAKE BELIEVE COSTUMES & D         WBE         \$105.00           MB - JACKSONVILLE         WBE         \$284.46           MCGRAW-HILL PLATTS         WBE         \$2,150.00           MILLER BEARINGS JACKSONVI         WBE         \$10.85			\$7,695.48
MAKE BELIEVE COSTUMES & D         WBE         \$105.00           MB - JACKSONVILLE         WBE         \$284.48           MCGRAW-HILL PLATTS         WBE         \$2,150.00           MILLER BEARINGS JACKSONVI         WBE         \$10.88			\$795.00
MB - JACKSONVILLE         WBE         \$284.48           MCGRAW-HILL PLATTS         WBE         \$2,150.00           MILLER BEARINGS JACKSONVI         WBE         \$10.88			\$17,859.15
MCGRAW-HILL PLATTS WBE \$2,150.00 MILLER BEARINGS JACKSONVI WBE \$10.85			\$105.00
MILLER BEARINGS JACKSONVI WBE \$10.85			\$284.48
·			\$2,150.00
MYERS-SETH PUMP AP \$312.97			\$10.85
	MYERS-SETH PUMP	AP	\$312.97

NACE INTERNATIONAL	WBE	\$535.00
NAYAK CORPORATION	Al	\$3,600.00
NCL OF WISCONSIN INC	WBE	\$394.96
NORTHSIDE LOCK AND KEY	WBE	\$122.10
OMEGA ENGINEERING INC	WBE	\$683.40
PIPING TECHNOLOGY	Al	\$1,928.69
POSI LOCK PULLER	WBE	\$57.44
PRO CHEM INC	WBE	\$50,754.00
PROCESS MEASUREMENT	WBE	\$2,590.25
PROGRESSIVE POWER PROD	WBE	\$1,296.44
ROLLED ALLOYS	WBE	\$1,241.46
RONNIE'S LAWN EQUIPMENTS	WBE	\$1,810.35
RUBBER AND GASKET SPECTS	HI	\$17,029.13
SAFETYSIGN.COM	Al	\$724.08
SCIENCE FIRST WILDCO	WBE	\$544.63
SENCOMMUNICATIONS	WBE	\$188.07
SHARE CORPORATION	WBE	\$1,749.79
SOUL FOOD BISTRO	WBE	\$1,083.55
SOUTHEASTERN PUMP SPECIAL	HA	\$3,419.27
SOUTHLAND ELECTRICAL SUP	WBE	\$6,533.24
STEP BY STEP CONSULTING	WBE	\$7,000.00
THE DANBY GROUP LLP	WBE	\$155.00
THE UPS STORE #0692	WBE	\$609.91
THOMPSON INDUSTRIAL SVCS	WBE	\$1,054.64
THREADED FASTENERS	WBE	\$4,511.64
TIDBITS	WBE	\$3,388.18
TOBY'S BARBECUE INC	WBE	\$41.80
TOWN AND COUNTRY	WBE	\$30,652.39
TRAILER LEASING COMPANY	HI	\$6,281.58
TRIDENT SUPPLY COMPANY	WBE	\$4,347.29
TRINITY TOOL COMPANY	WBE	\$165.80
TRIST UTILITY PRDCTS INC	WBE	\$14,025.86
TUBELS SERVICE CENTER	WBE	\$126.24
UNITED LABORATORIES	WBE	\$20,932.39
UNIVERSAL BODY COMPANY	WBE	\$99.49
UNIVERSAL TANK SERV INC	WBE	\$454.55
UNIVERSITY DINER	WBE	\$53.94
VANGUARD INSTRUMENTS, INC	AP	\$699.73
VIGNEAUX CORPORATION	WBE	\$2,420.29
W W GAY FIRE & INTEGRATED SYSTEMS INC	Al	\$281,255.54
WATER CHEMISTRY INC	WBE	\$2,793.00

	Non - JSEB Minority/ Women Total	s \$2,992,185.35
ZEPHYRHILLS WATER	AP	\$5,159.31
ZABATT INC	HI	\$1,063,728.77
WWW.NEWEGG.COM	WBE	\$6,210.84
WORKPLACE SOLUTIONS	WBE	\$225.00
WESTSIDE ELECTRIC INC	WBE	\$11,246.21

### III. B. 3.

Sole Source and Emergency Procurement/Procurement Appeals
Board Report



April 3, 2017

SUBJECT:	SOLE SOURCE & EMERGENCY PROCUREMENT/PROCUREMENT APPEALS BOARD REPORT
Purpose:	☐ Information Only ☐ Action Required ☐ Advice/Direction
submit a report	s 1-113 and 1-114 of the JEA Purchasing Code require the Chief Purchasing Officer to to on all Sole Source and Emergency procurements and all Procurement Appeals Board e JEA Board on a quarterly basis.
	Full transparency of these procurement actions is necessary to maintain public confidence g process and to ensure competition is achieved when in JEA's best interest.
Effect: JEA's F JEA Board.	Procurement Department is responsible for maintaining these records and reporting to the
	it: To maintain public confidence in JEA's bidding process and to ensure competition is in JEA's best interest.
Recommende	d Board action: Provided for information; no action required.
For additional	information, contact: John McCarthy, Director Supply Chain Management, 665-5544

Submitted by: PEM/MHD/JPM/RMW



### **Commitments to Action**





### **INTER-OFFICE MEMORANDUM**

April 3, 2017

SUBJECT: SOLE SOURCE & EMERGENCY PROCUREMENT/PROCUREMENT

APPEALS BOARD REPORT

FROM: Paul E. McElroy, Managing Director/CEO

**TO:** JEA Board of Directors

### **BACKGROUND:**

Sections 1-113 and 1-114 of the JEA Purchasing Code require the Chief Procurement Officer to submit a report on all Sole Source and Emergency procurements and all Procurement Appeals Board decisions to the JEA Board on a quarterly basis.

### **DISCUSSION:**

This report is submitted for the quarter ending March 31, 2017. Summary information for all awards is provided below. A detailed listing for the Formal Sole Source and Emergency Awards is attached. Detailed back-up information for all other awards is retained by the Chief Procurement Officer and is available upon request. There were no Procurement Appeals Board (PAB) actions this quarter.

### Quarter Ending March 31, 2017

Formal Awards	Number	%	Do	llar Amount	%
Total	60		\$	100,754,219	
Sole Source Awards	0	0.00%	\$	0	0.00%
Emergency Awards	1	1.67%	\$	650,000	0.65%
Informal Awards	Number	%	Do	llar Amount	%
Total	2164		\$	18,573,421	
Sole Source Awards	1	0.05%	\$	69,977	0.38%
Emergency Awards	3	0.14%	\$	67,359	0.36%

### **RECOMMENDATION:**

This item is submitted for information. No action by the Board is required.

Paul E. McElroy, Managing Director/CEO

PEM/MHD/JPM/RMW

Return to Agenda

# Total Sole Source & Emergency Procurement Actions

	FY16 Q3	FY16 Q4	FY17 Q1	FY17 Q2
Total Awards	\$190.38M	\$175.25M	\$97.67M	\$119.33M
Sole Source (\$)	\$0M	\$1.6M	\$0M	\$0.07M
Sole Source (%)	0%	0.91%	0%	0.06%
Emergency (\$)	\$0.04M	\$0.07M	\$0.10M	\$0.72M
Emergency (%)	0.02%	0.04%	0.10%	0.60%

### Formal Sole Source Awards by Department - Detailed Listing

12 months ending March 31, 2017

III. B. 3. 4/18/2017

Sole Source Awards (1 Item totaling \$1,614,087.00)

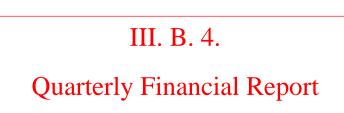
Award Date	Amount	Requesting Dept	Vendor	Description	Sourcing Basis
8/4/2016	\$1,614,087.00	R Pocho	Evoqua Water Technologies	Wastewater Treatment "Package" Plant	Sole Source - JEA had an opportunity to procure a used Water Treatment "Package" Plant to replace existing equipment in the Ponce De Leon wastewater service territory; the existing treatment plant is at the end of its useful life. The equipment cost of a used plant is approximately 25-30% of a new plant. The physical condition of the used plant had to be assessed prior to purchase, and with the limited number of these types of plants, there is no common ground for the bidding process.
Total	\$1,614,087.00				

### Formal Emergency Awards by Department - Detailed Listing

12 months ending March 31, 2017

Emergency Awards (1 Item totaling \$650,000.00)

Lineigene	Emergency Awards (1 item totaling 5050,000.00)								
Award Date	Amount	Requesting Dept	Vendor	Description	Sourcing Basis				
2/16/2017	\$650,000.00		Ernst & Young U.S., LLP	FEMA Grant Consulting Engagement - Hurricane Matthew	Emergency - JEA procured services through an emergency contract with Ernst and Young to manage and oversee all aspects of the federal disaster grant process and effectively obtain any reimbursement available for damages incurred during Hurricane Matthew.				
Total	\$650,000.00								



# JEA Monthly Financial Summary as of March 31, 2017

# **Board of Directors**

April 18, 2017



## **Key Financial Metrics**

**Year-to-Date** 

FY2017 F	ull Year
----------	----------

Electric System	FY2017	FY2016	Forecast	Target	Result
Debt Service Coverage	2.5x	2.5x	2.4x	≥ 2.2x	1
Days Liquidity	350	360	311	150 to 250 days <sup>1</sup>	*
Days Cash on Hand	244	251	208		1
Debt to Asset %	64%	68%	62%	53.5% <sup>2</sup>	1

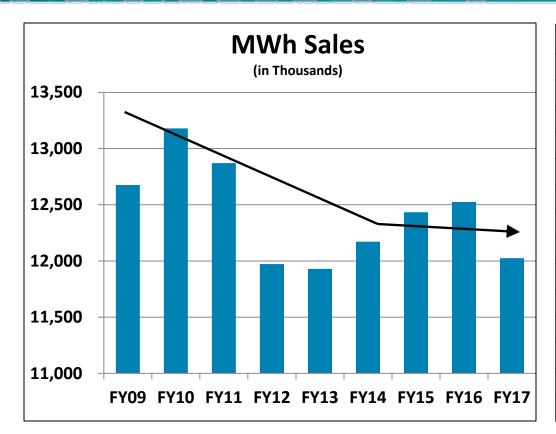
Water and Sewer System	FY2017	FY2016	Forecast	Target	Result
Debt Service Coverage	2.8x	3.0x	2.6x	≥ 1.8x	1
Days Liquidity	641	602	558	150 to 250 days <sup>1</sup>	1
Days Cash on Hand	537	497	459		1
Debt to Asset %	52%	54%	50%	49%³	1



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

<sup>&</sup>lt;sup>2</sup> Long-term target is 53.5%: per Moody's Sector In-Depth Report "Public Power Medians - Finances Hold Steady with Transition to Lower Carbon Environment", Sept. 2016 <sup>3</sup> Long-term target is 49%: calculated peer group from Moody's 214 Aa rated public water-sewer utilities, Dec. 2016

# **Electric System: MWh Sales**



Month	FY16	FY17	%
Oct	952,515	951,425	(0.1%)
Nov	923,705	863,238	(6.5%)
Dec	922,956	905,219	(1.9%)
Jan	1,049,897	932,807	(11.2%)
Feb	894,563	759,141	(15.1%)
Mar	893,954	914,242	2.3%
YTD	5,637,590	5,326,073	(5.5%)
Apr	900,013		
May	1,089,555		
Jun	1,231,251		
Jul	1,336,836		
Aug	1,254,240		
Sep	1,111,769		
Total/Forecast	12,561,253	12,025,900	

<u>Unit Sales Driver</u>: YTD MWh reduction due to moderate weather and decrease in FPU demand.



YTD Degree Days					
30-yr. Avg. FY16 FY17					
1,651	1,567 1,24				

YTD Customer Accounts					
<u>FY16</u> <u>FY17</u> <u>%</u>					
451,523	458,767	1.6%			

Total System	(5.5%)
Residential	(6.2%)
Comm./Industrial	(3.3)%
Interruptible	(1.2%)
Wholesale (FPU)	(49.9%)

# **Electric System: Financial Results and Cost Metrics**

(\$ in thousands)

Revenues	FY17 Forecast	FY16 Actual	FY17 Budget	FY17 vs FY16 (\$)	Variance (%)
Fuel Revenue	\$ 392,3921	\$ 426,653 <sup>2</sup>	\$ 449,776	\$ (34,261)	-8.0%) <sup>1</sup>
Base Revenue	749,394 <sup>1</sup>	750,038	735,204	(644)	-0.1%
Other Revenue	43,629	37,904	41,787	5,725	15.1%
Total Revenues	\$ 1,185,415	\$ 1,214,595	\$ 1,226,767	\$ (29,180)	(2.4%)
	<b>†</b>	\$-41M	<u></u>		
Select Expenses					
Fuel Expense	\$ 438,413	\$ 397,280	\$ 411,903	\$ (41,133)	-10.4%
Fuel Fund Transfers	(46,021)	29,373	37,705	75,394	
O & M Expense	208,404	192,527	226,180	(15 <i>,</i> 877)	-8.2%
Non-fuel Purchased Power	78,205	87,426	83,394	9,221	10.5%
Net Revenues	\$ 507,039	\$ 496,092	\$ 454,939	\$ 10,947	2.2%
	Ť	\$52M	<b>1</b>		
Capital Expenditures	\$ 151,343	\$ 150,926	\$ 153,200 <sup>3</sup>	\$ (417)	-0.3%
Debt Service	\$ 210,490 <sup>4</sup>	\$ 171,506	\$ 179,654	\$ (38,984)	-22.7%

Electric Costs / MWh	Non-Fuel
Target	\$ 53.94
Forecast	<u>55.02</u>
Difference	\$ (1.08)

Fuel Fund (\$ in n	nillions)
Beginning Balance	\$ 180
Surplus/(Deficit)	(46)
Ending Balance	\$ 134



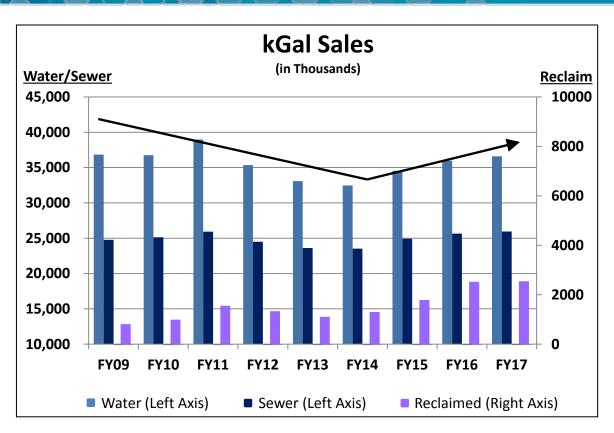
<sup>&</sup>lt;sup>1</sup> Includes rate change in December 2016

<sup>&</sup>lt;sup>2</sup> Net of \$57 million fuel credit and fuel rate reduction

<sup>&</sup>lt;sup>3</sup> Council approved limit for capital expenditures in FY17 is \$170 million

<sup>&</sup>lt;sup>4</sup> Includes additional \$40 million related to advanced debt refunding approved by Board in November 2016

### Water and Sewer System: kGal Sales



Month	FY16	FY17	%
Oct	3,120	3,129	0.3%
Nov	2,641	3,068	16.2%
Dec	2,758	2,923	6.0%
Jan	2,527	2,768	9.6%
Feb	2,479	2,624	5.9%
Mar	2,825	3,168	12.1%
YTD	16,351	17,680	8.1%
Apr	2,914		
May	3,523		
Jun	3,290		
Jul	3,736		
Aug	3,451		
Sep	3,094		
Total/Forecast	36,358	36,594	

<u>Unit Sales Driver</u>: YTD rainfall up 4 inches; rain days down 17.

Irrigation for February YTD FY17 up 31% versus March YTD FY16.

YTD Customer Accounts					
<u>FY16</u> <u>FY17</u> %					
Water	332,602	340,627	2.4%		
Sewer	257,410	264,059	2.6%		
Reclaimed 7,421 9,305 25.4%					

	YTD Rainfall					
	<u>30-Yr. Avg. FY16 FY17</u>					
Inches	19	14	18			
Days	47	45	28			

Total System	8.1%
Residential	8.1%
Comm./Industrial	0.6%
Irrigation	31.1%

# Water and Sewer System: Financial Results and Cost Metrics

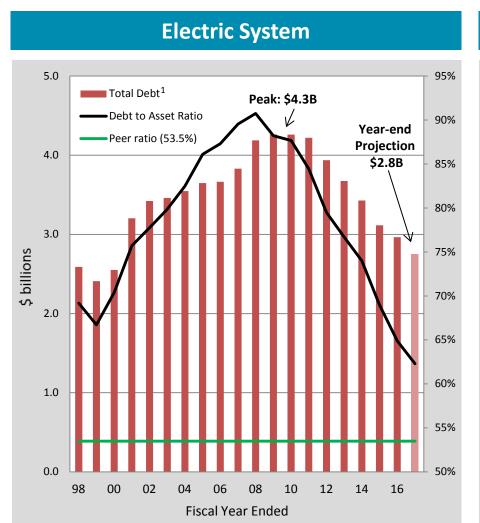
### (\$ in thousands)

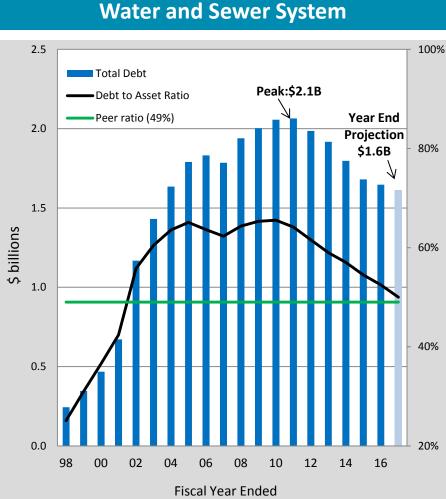
Revenues	FY17 Forecast	FY16 Actual	FY17 Budget	FY17 vs FY16 (\$)	Variance (%)
Water & Sewer Revenues	\$ 409,267	\$ 409,889	\$ 394,430	\$ (622)	-0.2%
Other Revenue	36,529	40,070	33,792	(3,541)	-8.8%
Total Revenues	\$ 445,796	\$ 449,959	\$ 428,222	\$ (4,163)	-0.9%
	<b>†</b>	\$18M	<b>†</b>		
Select Expenses					
O & M Expense	\$ 138,289	\$ 130,296	\$ 144,149	\$ (7,993)	-6.1%
Net Revenues	\$ 304,595	\$ 313,130	\$ 280,753	\$ (10,045)	-3.2%
	1	\$24M	<b>^</b>		
Capital Expenditures	\$ 217,095	\$ 147,363	\$ 205,000 <sup>1</sup>	\$ (69,732)	-47.3%)
Debt Service	\$ 115,506	\$ 95,418	\$ 118,375	\$ (20,088)	-21.1%

Cost / Kgal	Water	Sewer
Target	\$ 4.75	\$ 10.27
Forecast	4.80	<u> 10.59</u>
Difference	\$ (0.05)	\$ (0.32)



### **Debt and Debt to Asset Ratios**





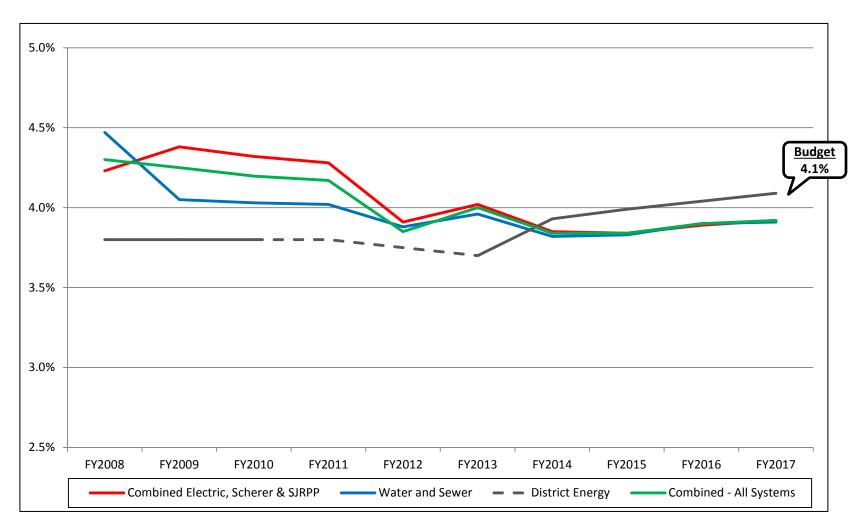


<sup>&</sup>lt;sup>1</sup> Includes JEA, Scherer and SJRPP

<sup>&</sup>lt;sup>2</sup> Per Moody's Special Comment, June 2014

<sup>&</sup>lt;sup>3</sup> As calculated from Moody's data for large Aa rated public water-sewer utilities

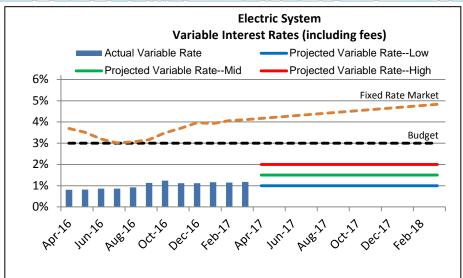
# Combined Debt Outstanding: Weighted Average Interest Rates

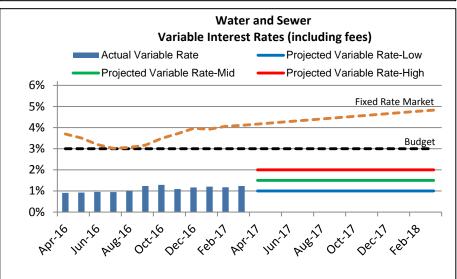




- Fiscal year end interest rates are net of BABs subsidy, original issue premiums / discounts and includes variable debt liquidity / remarketing fees and interest rate swap payments.
- - During FY2008 FY2013 DES was funded with variable rate debt at an average of 1 percent.

# Variable Rate Debt Risk Analysis





Total variable rate debt of \$882 with \$527 swapped to fixed rate

Liquidity Facilities and Direct Purchase Bonds (DPBs)				
Bank Moody's/S&P/Fitch \$ (in millions)				
Wells Fargo Bank N.A. (100% DPBs)	Aa2/AA-/AA	\$221	25	
JP Morgan Chase Bank N.A. Aa3/A+/AA- 1		199	24	
Royal Bank of Canada	Aa3/AA-/AA	193	23	
US Bank, N.A.	A1/AA-/AA	148	18	
Sumitomo	A1/A/A	52	6	
State Street Bank	Aa3/AA-/AA	31	4	
Total		\$844		

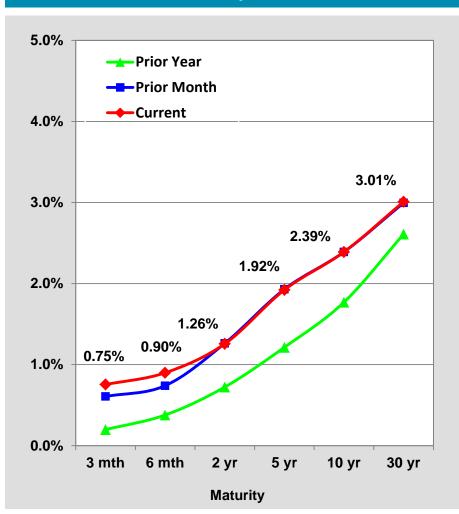
	Swap Providers		
Bank	Moody's/S&P/Fitch	\$ (in millions)	%
Morgan Stanley Capital Services	A3/BBB+/A	\$180	34
Goldman Sachs Mitsui Marine Derivative Products	Aa2/AA-/NR	137	26
JP Morgan Chase Bank N.A.	Aa3/A+/AA-	125	24
Merrill Lynch	Baa1/BBB+/A	85	16
Total		\$527	

#### Items of Interest

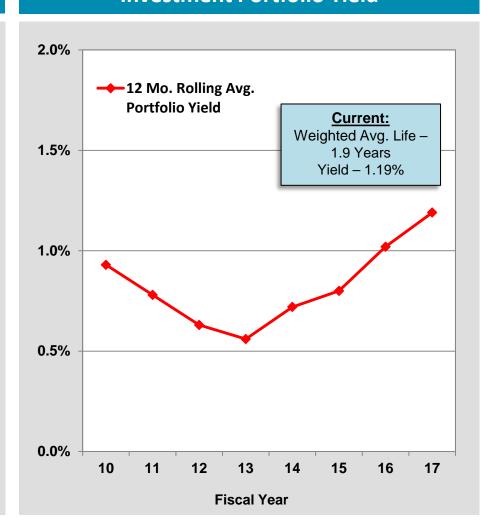
- Variable debt as a percentage of total debt:
  - Unhedged variable at 7% for Electric and 10% for Water and Sewer.
  - Hedged variable at 15% for Electric and 7% for Water and Sewer.
- Liquidity facilities / direct purchase bonds are with highly rated providers.
- No change in swap provider credit quality.
- JP Morgan liquidity facilities renewed in April 2017.
- US Bank liquidity facility renewals in Nov 2017.
- Variable rate reserve to mitigate risk of higher rates \$50 million.
- Used \$12 million of variable rate reserve on Feb 2017 Electric defeasance.

# **Combined Investments Outstanding**

### **U. S. Treasury Yield Curve**



#### **Investment Portfolio Yield**





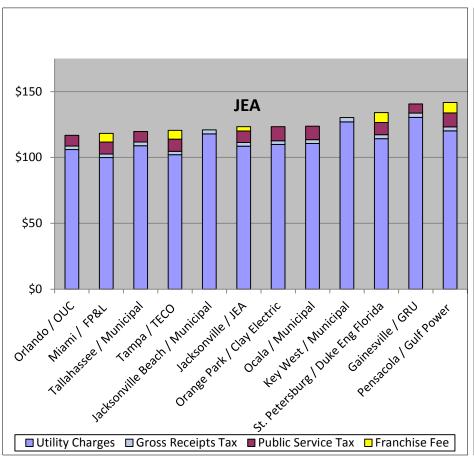
# Florida Utilities Monthly Bill Comparison

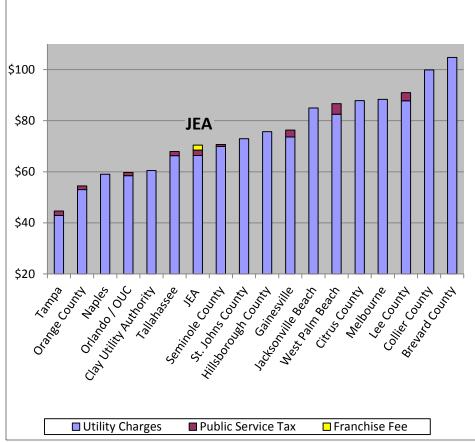
#### **Monthly Residential Electric Bills**

Consumption @ 1,000 kWh

#### **Monthly Residential Water Bills**

5/8" meter and 6 k/gals of Consumption







### III. B. 5.

JEA Sewer System: Framework to Resiliency – Analyze, Plan and Implement Improvement Activities

# Return to Agenda



April 7, 2017

April 7, 2017	
SUBJECT:	JEA SEWER SYSTEM: FRAMEWORK TO RESILIENCY UPDATE
Purpose:	
at the Novemb	s developed a multi-step plan, <u>JEA Sewer System: Framework to Resiliency</u> , presented er 15, 2016 Board Meeting, to analyze and assess the Hurricane Matthew event in an effort ear-term resiliency initiatives and to incorporate system resiliency in major rehabilitation and on standards.
Department of Operational im installations at for 100 portable generators in li	Early actions have been implemented in FY17 centered on communications, Florida Environmental Protection (FDEP) partnerships, and operational improvement activities. provement activities include fortifying the electric power supply, increasing generator pump stations by 20% with 47 new units installed by July 1 <sup>st</sup> , engaging in a rental contract e generator units, evaluating and modifying electrical controls at pump stations, activating eu of electric line power prior to the impacts of a storm, fortifying communication systems, existing technology to further monitor wet well levels and prioritize power supply restoration stations.
	nent immediate opportunities as the first phase to improve system resiliency in an effort to the improvements prior to the 2017 hurricane season.
implement imm significant reso	it: Approximately \$8 million of additional expenditures in FY17 have been allocated to nediate improvement opportunities that were not originally budgeted in FY17. In addition, burces have been applied and are ongoing to further identify, design and implement more nunication plans for various stakeholders.
Framework to	d Board action: Provide the Board an update on the multi-step JEA Sewer System: Resiliency plan for discussion and feedback, focusing on the improvement activities being ce prior to the potential impact hurricanes may have on Northeast Florida during 2017.
For additional	information, contact: Brian Roche 665-6580
Submitted by: PE	M/BJR
	Commitments to Action  Earn Customer

• Safety • Service • Growth<sup>2</sup> • Accountability

Integrity

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

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



Unbeatable Team

Return to Agenda



#### INTER-OFFICE MEMORANDUM

April 7, 2017

SUBJECT: JEA SEWER SYSTEM: FRAMEWORK TO RESILIENCY UPDATE

**FROM:** Brian Roche, VP/GM W/WW Systems

**TO:** JEA Board of Directors

#### **BACKGROUND:**

During Hurricane Matthew in October 2016, JEA's Water/Wastewater Systems performed very well in maintaining service to customers as less than 1% lost water and sewer services during the period impacted by Hurricane Matthew. However, JEA experienced sanitary sewer overflows (SSOs) during the three day period after the storm's impact to Northeast Florida primarily due to power outages at over half of JEA's 1375 sewer pump stations and the inability for operating personnel to travel to pump station sites during the peak storm period. JEA's Sanitary Sewer System continues to perform well in normal operating, "blue-sky" conditions, which is supported by preliminary feedback from the CMOM<sup>2</sup> consultant that is currently performing an assessment, under FDEP<sup>1</sup> oversight, of JEA's Sewer System. JEA, along with many other wastewater utilities across the nation, have opportunities to improve storm resiliency, including minimizing overflows during storm events.

JEA has developed a multi-step plan, <u>JEA Sewer System: Framework to Resiliency</u>, to analyze and assess the Hurricane Matthew event in an effort to implement near-term resiliency initiatives and to incorporate system resiliency in major rehabilitation and new construction standards. At the November 15, 2016 Board Meeting, the multi-step Framework to Resiliency was presented and discussed, including detailed reports on: Hurricane Matthew Assessment Report, Major Capital Improvements and Significant O&M Activities, and the Governor's 90-Day Emergency Rule: Public Notification of Pollution which was effective beginning September 26, 2016. A preliminary update of FY17 Improvement Activities was presented at the February 21, 2017 Board Meeting.

#### **DISCUSSION:**

Additional steps of the overall Framework to Resiliency plan are scheduled to reach milestone points and be discussed at future Board Meetings during this 2017 calendar year as noted in the attached presentation, with the April discussion focused on the Analyze, Plan and Implement Improvement Activities step. Significant mitigation activities are being placed in service including:

- Prioritized assessment of 1375 pump stations' power supply with strategic vegetation mitigation.
- Turn-key fixed generator installation at 47 pump stations at a cost of \$5.3 million
- Implementing a rental contract for 100 portable units for the June 1<sup>st</sup> to November 30<sup>th</sup> season
- Engaging an international engineering firm to redesign the electrical controls at key stations
- Installing an 800 kW generator at the 10 million gallon per day Buckman main pump station.
- Activating generators in lieu of electric line power prior to the impacts of a storm
- Leveraging technology to further monitor wet well levels and prioritize power supply restoration
- Fortifying communication systems which monitor pump station well levels and power supply
- Expanding mutual aid requests beyond the state of Florida's central group, FlaWARN<sup>3</sup>

- Procured a prototype ride-thru bunker
- Enhanced reporting of Reportable SSO's and minor events on JEA.com, and other medians

#### **RECOMMENDATION:**

Provide the Board an update on the multi-step JEA Sewer System: Framework to Resiliency plan for discussion and feedback, focusing on the improvement activities being placed in service prior to the potential impact hurricanes may have on Northeast Florida during 2017.

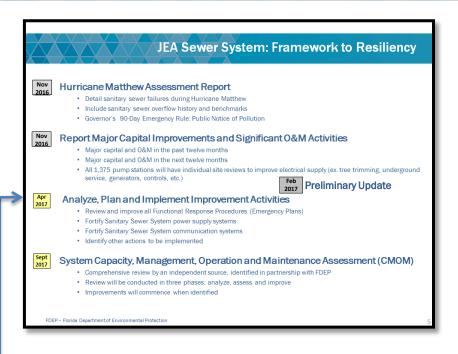
Paul E. McElroy, Managing Director/CEO

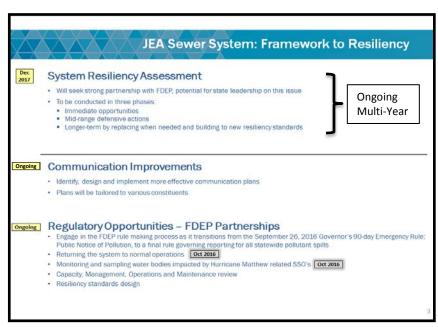
PEM/BJR



Framework to Resiliency
JEA Sanitary Sewer System
April 18, 2017

### **JEA Sewer System: Framework to Resiliency**





- Communication: JEA.com is the centralized source for information
- Regulatory: CMOM Assessment Workshop conducted in March under FDEP oversight
- Analyze, Plan and Implement Improvement Activities: Today's Update
- System Resiliency Assessment RFP: Mid-Range and Longer-Term Standards

# Analyze, Plan and Implement Improvement Activities Before 2017 Hurricanes

#### **Fortify Power Supply Systems to Pump Stations**

#### **Electric Service Type**

- A) UG Svc, UG Lat, UG Feed
- B) UG Svc, UG Lat, OH Feed
- C) UG/OH Svc, OH Lat, OH Feed
- D) OH Svc, No Lat, OH Feed

	Action	n Plans	
Upgrades 1) Equipment 2) Trees 3) Both	Underground Service and/or Lateral	Strategic Vegetation Mitigation	New Backup Generators

#### **Fortify Communication Systems**

- SCADA monitoring, and remote pump down where feasible
- Fiber at three Class 4 pump stations
- Remote start generators
- Battery back-up (48 hours) for high level float alarms

# Functional Response Procedures May 1 – 5: Emergency Preparedness Exercise



#### **Identify Other Actions to be Implemented**

- All JEA Electric pump stations logged as critical customers
- 800 kW generator at Buckman main pump station
- Electric controls/VFD redesign 118<sup>th</sup> St & Holiday Rd
- Class 4 pump stations disconnected from grid
- Generator testing extended run times
- Mutual Aid contracts
- Prototype ride-through bunker

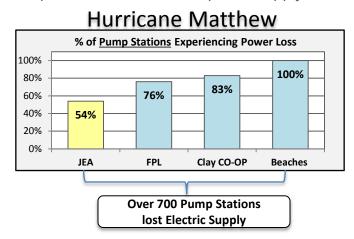
# **Resiliency: Electric Power Supply**

#### **Service Providers**

JEA has 1382 pump stations provided power by four (4) electric service providers

Electric Service Provider	# of Pump Stations	% by Electric Provider
JEA	1224	89%
FPL	128	9%
Clay County	12	1%
Beaches Energy	16	1%

JEA's CEMI 5 and storm hardening efforts over the past decade provided more reliable power supply service



### Power Supply Resiliency to Pump Stations

<u>Power Supply Type</u> Conversion of Overhead services to Underground

Underground Conversion	Identified	In Design	Completed
Service or Lateral	40	7	0

<u>Vegetation Exposure</u> Strategic vegetation mitigation

Power Supply Type	# JEA Stations	# Evaluated	Action Plans	# Complete
A) UG Svc, UG Lat, UG Feed	285	168	15	6
B) UG Svc, UG Lat, OH Feed	424	137	35	19
C) UG/ <u>OH Svc</u> , <u>OH Lat</u> , OH Feed	303	110	49	18
D) <u>OH Svc</u> , No Lat, OH Feed	192	69	24	11
Total	1224	484	123	54

### **New Generator Deployment**

# 1382 April 1382 Pump Stations

### **Prioritization Basis**

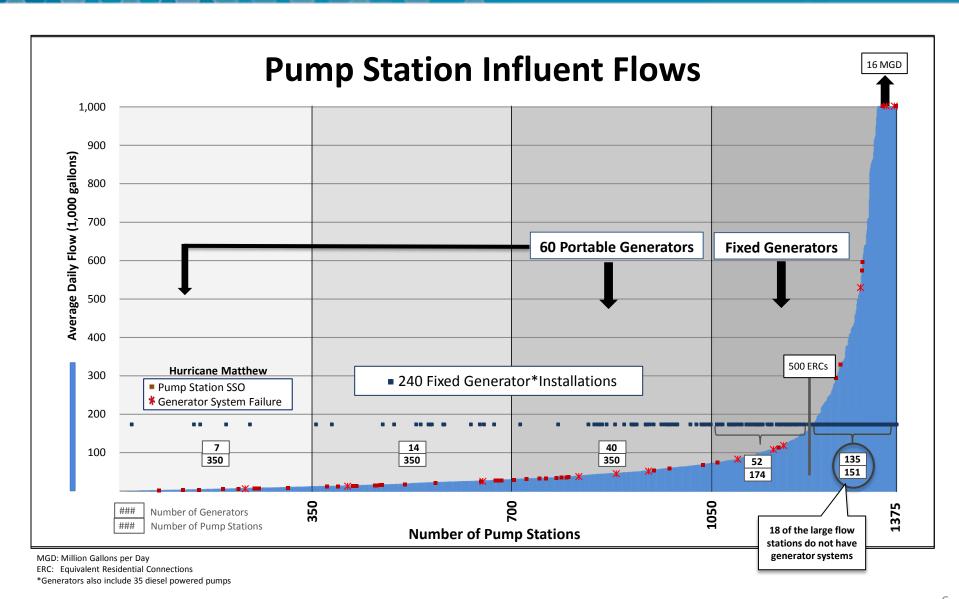
- ☐ FDEP Regulatory: ≥ 12" Force Main
- $\blacksquare$  EPB Rule III:  $\geq$  500 ERC's (441 GPM)
- Hurricane Matthew SSOs
  - ☐ Highest flow stations in FY17
  - Additional generators in FY18

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	A	$\wedge$ $\wedge$ $\wedge$ $\wedge$	$\wedge$ $\wedge$					
	_							
		Pump Station Address	FM ≥ 12"	Peak Flow (GPM)		Pump Station Address	FM ≥ 12"	Peak Flow (GPM)
	1	94 32ND STE	Yes	2352	19	11637 ETHEL RD	Yes	383
	2	5233 5TH ST W	No	1875	20	9846 FT CAROLINE RD	Yes	352
	3	6640 HARLOWBV	No	1569	21	7998 QUAIL COVE LN	Yes	312
	4	9801 BEAVER ST W	Yes	1143	22	250 BRYAN ST	Yes	264
	5	8362 TOUCHTON RD	Yes	943	23	10837 BLUE PACIFIC CT	Yes	258
	6	7663 ARGYLE FOREST BV	No	824	24	2251 MCCOY CREEK BV	Yes	258
	7	4467 SAN PABLORDS	No	722	25	3092 HUFFMAN BV	Yes	251
	8	1700 SAN PABLORD S	No	698	26	4950 SAN PABLORD S	Yes	230
	9	12858 GLENKERNAN PY	Yes	673	27	79 NOCATEE VILLAGE DR	Yes	179
	10	5490 SWAMPFOX RD	No	665	28	S103 KERNAN BV S	Yes	157
	11	5900 TOWNSEND RD	No	588	29	15598 MOSS HOLLOW DR	Yes	100
	12	1520 HAMMOND BV	No	570	30	3500 BOATWRIGHT WY	Yes	96
	13	2197 SAN PABLORDS	No	558	31	8617 WESTERN WY	Yes	50
edSSOs due	14	1060 ELLIS RD N	No	498	32	4130 SUNBEAM RD	Yes	44
pacts of Matthew	15	1818 WILLOWBRANCH TERRACE	Yes	471	33	11933 ACOSTA RD	Yes	40
maconem.	16	6630 BROADWAYAV	No	470	34	635 SHEARWATER PY	Yes	31
	17	4211 WOODMEREST	Yes	452	35	2446 TALLEYRAND AV	Yes	20
	18	2962 MANGROVE AV	No	452	_			

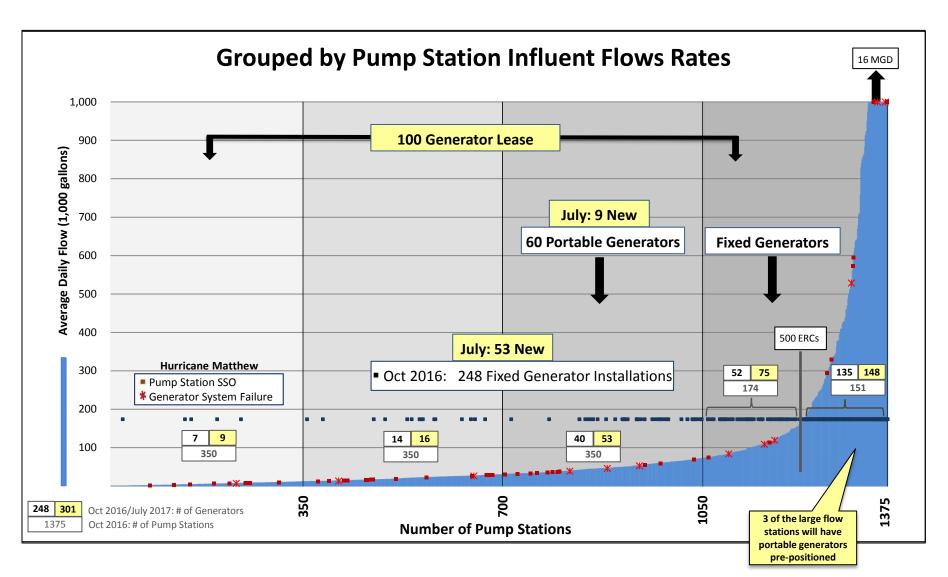
#### FY2017: \$6 million

- 47 <u>fixed generators/transfer switches:</u> May July installs through three turn-key contracts
- 9 new portable generators and 3 fixed diesel pumps purchased
- Portable units will be utilized at the 3 locations which can not accommodate a fixed generator or diesel pump due to property constraints, and also at the 1 location where a developer will install a generator during FY18

### **Generator Assessment – Hurricane Matthew**



# **Resiliency: Additional Generator Deployment**



# **Capital Improvement Projects: Sewer Collection and Pump Stations**

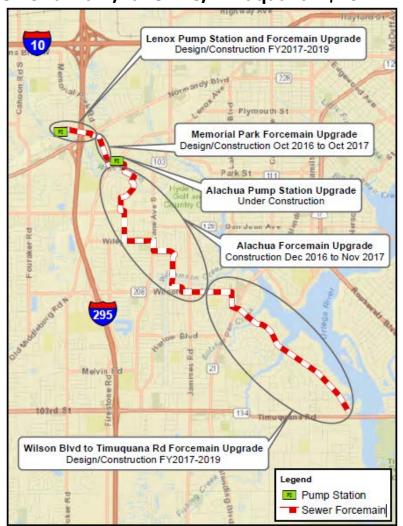
#### Five-year \$250M Capital Plan

2017	58,756,674
2018	61,475,489
2019	55,066,990
2020	41,733,000
2021	40,745,000
Total	\$257,777,153

### **Major Projects (FY16-FY19)**

(112)	- ,
Project Name	<u>Amount</u>
Southshores River Crossing FM	\$14M 🗸
Memorial Pk/Lane Ave/Timuquana Rd FM	\$20M
Pump Station Mechanical and Electrical Rebuilds (McMillan, Alachua, Bradley)	\$20M
Electrical Reliability (New Line Item) (generators, switches, controls, etc.)	\$7M
Rehabilitation of 20 to 25 Pump Stations	\$3M/yr
Large Diameter Condition Assessment and Pipe Replacement Program	\$10M/yr

#### Memorial Park/Lane Ave/Timuquana - \$20 Million



# **Capacity Management Operations Maintenance (CMOM)**

#### **152 Business Process Elements**

#### 1. Training & Safety

2. Engineering: Design/Construction

3. Engineering: Capacity

4. Engineering: Rehabilitation

5. Financing and Cost Analysis

6. SSO and Violations Reporting

7. Pump Station Operations

8. Contingency Plan

9. ....

10.....

### **Assessment Key**

Importance	Performance		Documentation
High	4:	Outstanding (Optimized)	Α
	3:	Above Average (Managed)	В
Medium	2:	Average (Defined)	С
	1:	Reactionary (Initial)	D
Low	0:	No Program (Unaware)	F
	N/A:	Not Applicable to JEA	

- Initial 2-day workshop and 1-day assessment held in March with a preliminary report issued
- Field work will be conducted this summer with a final CMOM report published in <u>September</u>
- Preliminary feedback from the CMOM consultant, under FDEP oversight, indicates that JEA's sewer system is operating well in most elements, and in many areas is an industry leader

### Benchmarking: Reportable and SSOs Events

#### **FDEP Reportable SSOs**

- Sewer spills of any volume that reaches designated Waters of the State, or
- Sewer spills ≥ 1,000 gallons, or
- Threatens the environment or public health

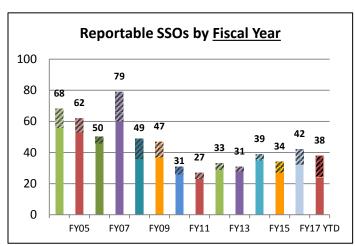
FDEP reviews all <u>Reportable</u> SSOs quarterly, and JEA submits an Annual Report

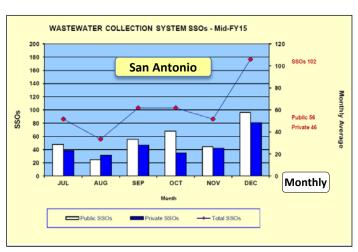
#### SSO Events – Local DEP Only

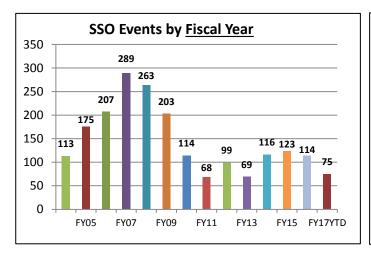
- 50 to 999 gallons
- Not to State Watch Officer

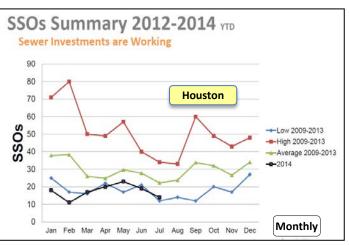
#### **Minor SSO Events**

Sewer spills less than 50 gallons that do not threaten the environment or public health









JEA performance in Blue-Sky conditions compares favorably to other large Wastewater Utilities, where further benchmarking analysis and reporting will be developed

## **JEA Framework to Resiliency**

### Framework to Resiliency

Nov, 2016	Hurricane Matthew Assessment Report
-----------	-------------------------------------

Nov, 2016	Report Major Capital Improvements and Significant O&M Activities
-----------	--

Feb, 2017	Improvement Activities: Preliminary	/ Update
	in provenience Activities: I reminiarly	paate

Apr, 2017	Analyze, Plan and Implement Improvement Activities
-----------	--

Sep. 2017	System Capacity, Management, and Operation, and Maintenance Assessment (CI	MOM)
		,

Dec, 2017 | System Resiliency Assessment

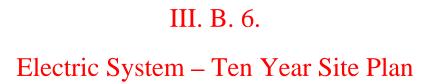


Multi-Year ongoing effort to implement:

- Mid-Range Defensive Actions
- Long Term Design Changes

Ongoing | Communication Improvements

Ongoing Regulatory Opportunities







March 28, 2017

SUBJECT:	ELECTRIC SYSTEM - TEN	YEAR SITE PLAN	
Purpose:		Action Required	Advice/Direction
		ion (PSC) requires all Florida e ive long term electric system g	electric utilities to file an annual eneration plans.
<b>Significance:</b> The PSC uses this information to ensure that the state has sufficient generation to meet native load, that utilities are prudently planning their systems, and that the state maintains an adequate reserve margin of generation to ensure the reliable supply of electricity.			
<b>Effect:</b> Continued, long term supply of reliable and affordable electricity to our customers is a primary goal of this planning effort. Electric System debt is required to fund capital expenditures for new generation projects recommended in the Ten Year Site Plan.			
Cost or Benefit: Costs are included in the Capital Investment Plan.			
Recommended Board action: No action is required by the Board; this item is submitted for information.			
For additional information, contact: Steve McInall, (904) 665-4309			

Submitted by: PEM/ MJB/ SGM



#### **Commitments to Action**





#### INTER-OFFICE MEMORANDUM

March 28, 2017

SUBJECT: ELECTRIC SYSTEM - TEN YEAR SITE PLAN

FROM: Paul E. McElroy, Managing Director/CEO

**TO:** JEA Board of Directors

#### **BACKGROUND:**

Each year JEA prepares a Ten Year Site Plan (TYSP) as a required filing of the Florida Public Service Commission (PSC). The PSC uses this information to ensure that the state has sufficient generation to meet native load, that utilities are prudently planning their systems, and that the state maintains an adequate reserve margin of generation to ensure the reliable supply of electricity.

#### **DISCUSSION:**

One of the key drivers for additional electric system capacity is load growth. JEA annually prepares a peak demand and energy forecast for a ten year planning horizon. On average, JEA peak demand and energy is projected to grow at reduced levels around 0.4 - 0.7% annually over the next ten years. Depending on the strength of the local economic recovery, these projected demand levels could conceivably be even lower.

With our relatively low projected load growth, the resource plan from last year and the decommissioning of SJRPP, annual and seasonal purchase power agreements are recommended in this 2017 TYSP to meet JEA's firm demand and reserves. This year's resource plan includes the SJRPP Sales suspension and decommissioning in January 2018 and the nuclear power purchase agreement with the Municipal Electric Authority of Georgia (MEAG) for our portion of the new Plant Vogtle Units 3 and 4 currently under construction. This plan does not address any system changes that may have been required for the EPA Clean Power Plan, currently under review. The Board approved a Solar Policy in December 2014 calling for an additional 38 MW solar photovoltaic (PV). Included in this plan is 27 MW of additional solar PV which represents signed purchased power agreements to-date. One additional proposal to supply 5 MW of solar PV is being negotiated.

#### **RECOMMENDATION:**

No action is required by the Board; this item is submitted for information. Staff is available to answer any questions on the TYSP.

Paul E. McElroy, Managing Director/CEO

PEM/MJB/SGM

# JEA Board of Directors April 2017

Electric System
Ten Year Site Plan



# Background

TYSP data is due annually to Florida Reliability
Coordinating
Council (FRCC) in March and is the basis for studies conducted for the state.

TYSP reports from utilities throughout the state are due annually to FPSC on April 1.

- The Florida Public Service Commission (FPSC) is responsible for ensuring that Florida's electric utilities plan, develop, and maintain a coordinated electric power grid throughout the state that ensures electric system reliability and integrity is maintained at a reasonable cost.
- The Ten Year Site Plan (TYSP) provides information and data that will facilitate the FPSC's review.
- JEA's 2017 TYSP provides information related to JEA's power supply strategy to adequately meet the forecasted needs of our customers for the ten year planning period from January 1, 2017 to December 31, 2026.



# **Ten Year Site Plan Contents**

The 2017 TYSP does not address any system changes that may be required in order to comply with the EPA's Clean Power Plan (CPP) Rule.

President Trump signed an executive order that initiates a review of the CPP and unravels a handful of other energy orders and memorandums.

# The TYSP addresses the following topics:

- Existing and Committed Facilities
  - Power Supply System Description
  - Transmission and Distribution
  - Demand Side Management
  - Clean Power and Renewable Energy
- Forecasts and Planning Assumptions
  - Electric Demand and Energy Forecast
  - Plug-in Electric Vehicle (PEV) Forecast
  - Energy Efficiency Forecast
  - Fuel Price Forecast
  - Economic Parameters
- Future Resource Needs



# **Total Demand & Energy Forecast**

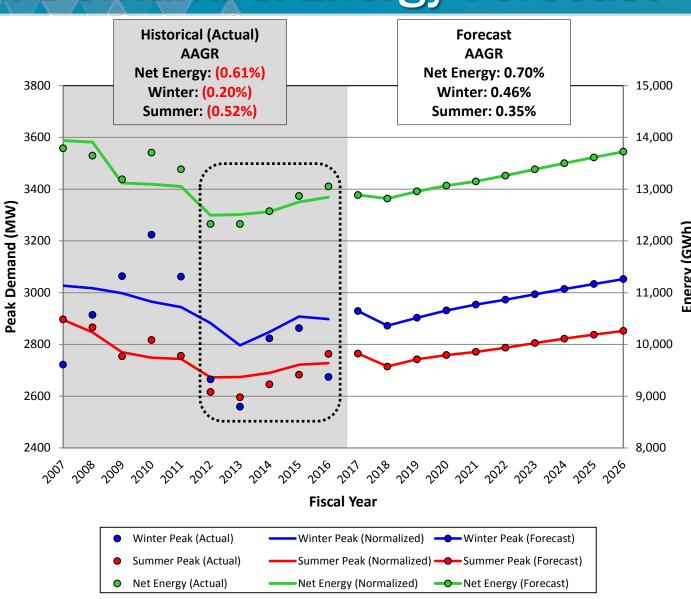
JEA has experienced decline since 2007.

JEA began experiencing a slow recovery starting in 2012.

Normalized Annual
Average Growth Rate
(AAGR)
from 2012 to 2016
Net Energy: 0.69%
Winter Peak: 0.14%
Summer Peak: 0.51%

FPU's wholesale power agreement ends
December 31, 2017. Per this agreement, JEA sold 318 GWh and served a peak demand of 82 MW in CY 2016.

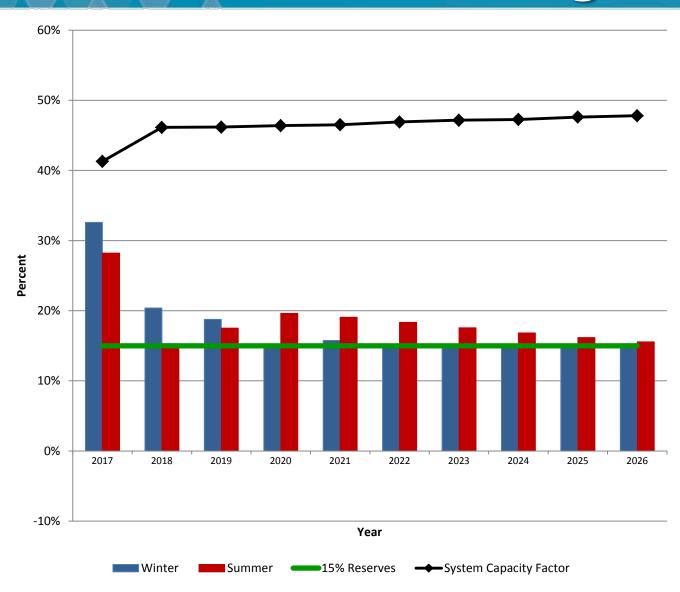




# Reserve Margin

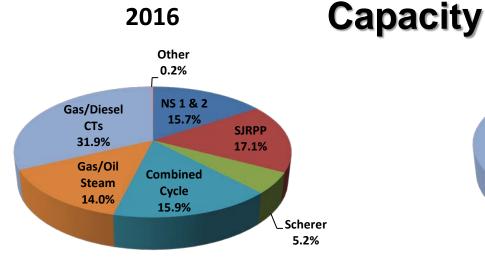
Minimum 15
percent reserve
margin maintained
throughout 10 year
planning horizon
with annual and
seasonal purchases.

No new generation needed to meet load and reserve requirements.

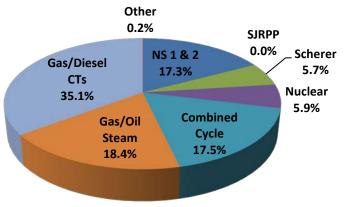




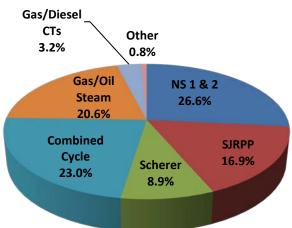
# **Fuel Mix for Electricity Production**





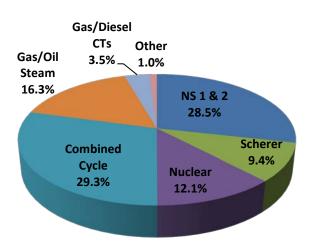






# **Energy**







# **Generation Reference Plan**

Year	Resource (5)
2017	Solar PPAs (27 MW) <sup>(1)</sup>
2018	SJRPP Sale to FPL Suspended (383 MW) (2) SJRPP Units 1 & 2 Retired (- 1020 MW) (2) Annual Combined Cycle Purchase (225 MW) (3)
2019	Trail Ridge Contract Expires (- 9 MW) Annual Combined Cycle Purchase (225 MW) (3) MEAG Plant Vogtle 3 Purchase (100 MW) (4)
2020	MEAG Plant Vogtle 4 Purchase (100 MW) (4)

#### Notes

- (1) Signed Solar PV PPAs included in this plan; 27 of the 38 MW.
- (2) SJRPP sales end and plant decommissioned 1/1/2018, pending approval of definitive agreements.
- (3) Annual Purchase Power agreement for 2018 & 2019 pending approval of SJRPP decommissioning.
- (4) Current Commercial Operation Date (CODs) for 100 MW each of Vogtle Units 3 & 4 are 6/2019 and 6/2020.
- (5) Seasonal purchase power for 2020-2026 (200 MW Summer and 0-100 MW Winter) to be acquired by TEA at minimum the season prior to need.





# TEN YEAR SITE PLAN

April 2017

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#### List of Abbreviations

#### **Type of Generation Units**

- CA Combined Cycle Steam Turbine Portion, Waste Heat Boiler (only)
- CC Combined Cycle
- CT Combined Cycle Combustion Turbine Portion
- GT Combustion Turbine
- FC Fluidized Bed Combustion
- IC Internal Combustion
- ST Steam Turbine, Boiler, Non-Nuclear

#### **Status of Generation Units**

- FC Existing generator planned for conversion to another fuel or energy source
- M Generating unit put in deactivated shutdown status
- P Planned, not under construction
- RT Existing generator scheduled to be retired
- RP Proposed for repowering or life extension
- TS Construction complete, not yet in commercial operation
- U Under construction, less than 50% complete
- V Under construction, more than 50% complete

#### **Types of Fuel**

#### BIT Bituminous Coal

- FO2 No. 2 Fuel Oil
- FO6 No. 6 Fuel Oil
- MTE Methane
- NG Natural Gas
- SUB Sub-bituminous Coal
- PC Petroleum Coke
- WH Waste Heat

#### **Fuel Transportation Methods**

- PL Pipeline
- RR Railroad
- TK Truck
- WA Water

#### Introduction

The Florida Public Service Commission (FPSC) is responsible for ensuring that Florida's electric utilities plan, develop, and maintain a coordinated electric power grid throughout the state. The FPSC must also ensure that electric system reliability and integrity is maintained, that adequate electricity at a reasonable cost is provided, and that plant additions are cost-effective. In order to carry out these responsibilities, the FPSC must have information sufficient to assure that an adequate, reliable, and cost-effective supply of electricity is planned and provided.

The Ten-Year Site Plan (TYSP) provides information and data that will facilitate the FPSC's review. This TYSP provides information related to JEA's power supply strategy to adequately meet the forecasted needs of our customers for the planning period from January 1, 2017 to December 31, 2026. This power supply strategy maintains a balance of reliability, environmental stewardship, and low cost to the consumers.

This TYSP does not address any system changes that may be required in order to comply with the Environmental Protection Agency's Clean Power Plan (CPP) Rule.

#### 1. Description of Existing Facilities

#### 1.1 Power Supply System Description

#### 1.1.1 System Summary

JEA is the eighth largest municipally owned electric utility in the United States in terms of number of customers. JEA's electric service area covers most of Duval County and portions of Clay and St. Johns Counties. JEA's service area covers approximately 900 square miles and serves approximately 450,000 customers.

JEA consists of three financially separate entities: the JEA Electric System, the St. Johns River Power Park bulk power system, and the Robert W. Scherer bulk power system. The total projected net capability of JEA's generation system for 2017 is 4,110 MW for winter and 3,769 MW for summer. Details of the existing facilities are displayed in TYSP Schedule 1.

#### 1.1.1.1 The JEA Electric System

The JEA Electric System consists of generating facilities located on four plant sites within the City of Jacksonville (The City); the J. Dillon Kennedy Generating Station (Kennedy), the Northside Generating Station (Northside), the Brandy Branch Generating Station (Brandy Branch), and the Greenland Energy Center (GEC).

Collectively, these plants consist of two dual-fired (petroleum coke/coal) Circulating Fluidized Bed steam turbine-generator units (Northside steam Units 1 and 2); one dual-fired (oil/gas) steam turbine-generator unit (Northside steam Unit 3); five dual-fired (gas/diesel) combustion turbine-generator units (Kennedy GT7 and GT8, and Brandy Branch GT1, CT2, and CT3); two natural gas-fired combustion turbine-generator units (GEC GT1 and GT2); four diesel-fired combustion turbine-generator units (Northside GTs 3, 4, 5, and 6); and one combined cycle heat recovery steam generator unit (Brandy Branch steam Unit 4).

#### 1.1.1.2 The Bulk Power Systems

#### 1.1.1.2.1 St. John's River Power Park

The St. Johns River Power Park (SJRPP) is jointly owned by JEA (80 percent) and Florida Power and Light (20 percent). SJRPP consists of two nominal 638 MW bituminous coal fired units located north of the Northside Generating Station in Jacksonville, Florida. Unit 1 began commercial operation in March 1987 and Unit 2 followed in May 1988. The two units have operated efficiently since commercial operation.

Although JEA is the majority owner of SJRPP, both owners are entitled to 50 percent of the output of SJRPP. Since Florida Power and Light (FPL) ownership is only 20 percent, JEA has agreed to sell, and FPL has agreed to purchase, on a "take-or-pay" basis, 37.5 percent of JEA's

80 percent share of the generating capacity and related energy of SJRPP. Contractually, the sale would continue until the earlier of the Joint Ownership Agreement expiration in October 2021 or the realization of the sale limit which was expected to occur June 2019. In March 2017, JEA and FPL announced a tentative agreement to decommission SJRPP in January 2018. Definitive agreements related to plant closure are being developed. Final JEA and FPL approval of the agreements are expected later in 2017. For the purpose of this TYSP, JEA reflects a January 2018 decommissioning of SJRPP.

#### 1.1.1.2.2 Robert W. Scherer Generating Station

Robert W. Scherer Unit 4 is a coal-fired generating unit with a net output of 846 MW located in Monroe County, Georgia. JEA and FPL have purchased an undivided interest of this unit from Georgia Power Company. JEA has a 23.6 percent ownership interest in Unit 4 (200 net MW) and proportionate ownership interests in associated common facilities and the associated coal stockpile. JEA has firm transmission service for delivering the energy output from this unit to JEA's system.

#### 1.1.2 Purchased Power

#### 1.1.2.1 Trail Ridge Landfill

In 2006, JEA entered into a purchase power agreement (PPA) with Trail Ridge Energy, LLC (TRE) to receive up to 9 net MW of firm renewable generation capacity utilizing the methane gas from the City's Trail Ridge landfill located in western Duval County (the "Phase One Purchase"). The TRE gas-to-energy facility began commercial operation December 6, 2008 for a ten year term ending December 2018.

JEA and TRE executed an amendment to this purchase power agreement on March 9, 2011 to include additional capacity. The "Phase Two Purchase" amendment included up to 9 additional net MW. Landfill Energy Systems (LES) has developed the Sarasota County Landfill in Nokomis, Florida (up to 6 net MW) to serve part of this Phase Two agreement. This portion of the Phase Two purchase began February 2015.

#### 1.1.2.2 Solar Generation

#### 1.1.2.2.1 Jacksonville Solar

In May 2009, JEA entered into a purchase power agreement with Jacksonville Solar, LLC (Jax Solar) to receive up to 12 MW (AC rating) of as-available renewable energy from the solar plant located in western Duval County. The Jacksonville Solar facility consists of approximately 200,000 photovoltaic panels on a 100 acre site and was forecasted to produce an average of 22,340 megawatt-hours (MWh) of electricity per year. The Jacksonville Solar plant began commercial operation at full designed capacity September 30, 2010. Jax Solar generated 20,531 MWh in calendar year 2016.

#### 1.1.2.2.2 New Solar Purchase Power Agreements

In 2014, JEA's Board approved a Solar Photovoltaic Initiative that supports up to 38 additional MW (AC). If fully subscribed, this will bring JEA's solar portfolio to 50 MW. The additional energy will be acquired through Purchase Power Agreements.

JEA issued Solar PV RFPs in December 2014 and April 2015 to solicit PPA proposals to satisfy the adopted 2014 Solar Policy. JEA awarded a total of 31.5 MW of solar PV power purchase contracts with terms of 20-25 years to various vendors. Of the awarded contracts, only seven agreements have been finalized for a total of 27 MW. All these solar facilities are expected to be completed and operational by 2018.

#### 1.1.2.3 Nuclear Generation

JEA's Board has established targets to acquire 10 percent of JEA's energy requirements from nuclear sources by 2018 and up to 30 percent by 2030. In March 2008, the JEA Board of Directors approved the pursuit of nuclear energy partnerships as part of a strategy for greater regulatory and fuel diversification. Meeting these targets will result in a smaller carbon footprint for JEA's customers.

In June 2008, JEA entered into a 20 year purchase power agreement (PPA) with the Municipal Electric Authority of Georgia (MEAG) for a portion of MEAG's entitlement to Vogtle Units 3 and 4. These two new nuclear units are under construction at the existing Plant Vogtle location in Burke County, GA. Under this PPA, JEA is entitled to a total of 206 MW of firm capacity from these units. After accounting for transmission losses, JEA is anticipating to receive a total of 200 MW of net firm capacity from these units. The current schedule makes available to JEA 100 net MW of capacity beginning June 1, 2019 from Unit 3 and an additional 100 net MW beginning June 1, 2020 from Unit 4. Table 1 lists JEA's current purchased power contracts.

Contra	act	Start Date	End Date	MW <sup>(1)</sup>	Product Type
LES	I	December 6, 2008	December 5, 2018	9	Annual
Trail Ridge	II	February 1, 2014	November 30, 2026	6	Annual
MEAG	Unit 3	June 1, 2019	June 1, 2039	100	Annual
Plant Vogtle	Unit 4	June 1, 2020	June 1, 2040	100	Annual
Jacksonvil	le Solar	September 30, 2010	September 30, 2040	12	Annual
Montgome	ry Solar	May 2017	May 2042	7	Annual
Old Plank Ro	oad Solar	August 2017	August 2037	3	Annual
Blair Site	Solar	December 2017	December 2037	4	Annual
Imeson	Solar	December 2017	December 2037	5	Annual
Simmons Ro	ad Solar	December 2017	December 2037	2	Annual
Old Kings	Solar	December 2017	December 2037	1	Annual
Starratt S	Solar	December 2017	December 2037	5	Annual

**Table 1:** JEA Purchased Power Schedule

#### 1.1.2.4 Cogeneration

Cogeneration facilities help meet the energy needs of JEA's system on an as-available, non-firm basis. Since these facilities are considered energy only resources, they are not forecasted to contribute firm capacity to JEA's reserve margin requirements.

Currently, JEA has contracts with one customer-owned qualifying facility (QF), as defined in the Public Utilities Regulatory Policy Act of 1978. Anheuser Busch has a total installed summer rated capacity of 8 MW and winter rated capacity of 9 MW.

In 2014, JEA established a Distributed Generation (DG) Policy which provides requirements for customer-owned electric generators connecting to the JEA electric grid. This policy is applicable to all nonrenewable customer-owned generation, and to all renewable customer-owned generation that does not qualify under the JEA Net Metering Policy. All systems under this policy will fall into one of the following gross power rating categories:

- DG-1 Nonrenewable < 50 kW</li>
- DG-2 Nonrenewable 50 kW ≤ DG ≤ 2 MW
- DG-3D All over 2 MW with distribution level connection to JEA
- DG-3T All DG over 2 MW with transmission level connection to JEA

A purchase power agreement is required to connect to JEA under this policy and pricing is based on the category of subscription which is also defined in this policy.

<sup>(1)</sup> Capacity level may vary over contract term.

# 1.1.3 Power Sales Agreements

## 1.1.3.1 Florida Public Utilities Company

JEA has furnished wholesale power to Florida Public Utilities Company (FPU) for resale to the City of Fernandina Beach in Nassau County, north of Jacksonville, since the 1970s. In September 2006, JEA and FPU entered into a 10 year agreement for JEA to supply FPU all of their system energy requirements. This agreement began January 1, 2008, and is expected to end December 31, 2017. In calendar year 2016, JEA supplied FPU annual peak demand of 82 MW and total energy of 266 GWh, 3.0 percent of JEA's annual peak demand and 2.1 percent of JEA's total system energy requirement. For the purpose of this TYSP, the power sales agreement to FPU ends on December 31, 2017.

JEA 2017 Ten Year Site Plan Existing Facilities

Schedule 1: Existing Generating Facilities

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Plant Name	Unit Number	Location	Unit Type	Fuel Ty	ре	Fuel Transp	ort	Commercial In-Service	Expected Retirement	Gen Max Nameplate (b)	Net MW C	apability	Ownership	Status
			<b>3</b> .	Primary	Alt.	Primary	Alt.	Mo/Yr	Mo/Yr	kW	Summer	Winter		
Kennedy										<u>407,600</u>	<u>300</u>	<u>382</u>		
	7	12-031	GT	NG	FO2	PL	WA	6/2000	(a)	203,800	150	191	Utility	
	8	12-031	GT	NG	FO2	PL	WA	6/2009	(a)	203,800	150	191	Utility	
Northside										1,512,100	<u>1,322</u>	<u>1,356</u>		
	1	12-031	ST	PC	BIT	WA	RR	5/2003	(a)	350,000	293	293	Utility	
	2	12-031	ST	PC	BIT	WA	RR	4/2003	(a)	350,000	293	293	Utility	
	3	12-031	ST	NG	FO6	PL	WA	7/1977	(a)	563,700	524	524	Utility	
	33-36	12-031	GT	FO2		WA	TK	1/1975	(a)	248,400	212	246	Utility	
Brandy Bran	ch									<u>879,800</u>	<u>651</u>	<u>786</u>		
	1	12-031	GT	NG	FO2	PL	TK	5/2001	(a)	203,800	150	191	Utility	
	2	12-031	CT	NG	FO2	PL	TK	5/2001	(a)	203,800	150	186	Utility	
	3	12-031	CT	NG	FO2	PL	TK	10/2001	(a)	203,800	150	186	Utility	
	4	12-031	CA	WH				1/2005	(a)	268,400	201	223	Utility	
Greenland E	nergy Cent	er								<u>406,600</u>	<u>300</u>	<u>372</u>		ļ
	1	12-031	GT	NG		PL		6/2011	(a)	203,800	150	186	Utility	
	2	12-031	GT	NG		PL		6/2011	(a)	203,800	150	186	Utility	
St. Johns Ri	ver Power F	Park	•							1,359,200	1,002	<u>1,020</u>		
	1	12-031	ST	BIT	PC	WA	RR	3/1987	1/1/2018	679,600	501	510	Joint	(c)
	2	12-031	ST	BIT	PC	WA	RR	5/1988	1/1/2018	679,600	501	510	Joint	(c)
Scherer														
	4	13-207	ST	BIT		RR		2/1989	(a)	990,000	194	194	Joint	(d)
JEA System	Total										3,769	4,110		(e)

#### Notes:

- (a) Units expected to be maintained throughout the TYSP period.
- (b) Generator Max Nameplate is total unit not ownership.
- (c) Net capability reflects JEA's 80% ownership of Power Park.

- (d) Net capability reflects JEA's 23.64% ownership in Scherer 4.
- (e) Numbers may not add due to rounding.

# 1.2 Transmission and Distribution

#### 1.2.1 Transmission and Interconnections

The JEA transmission system consists of 745 circuit-miles of bulk power transmission facilities operating at four voltage levels: 69 kV, 138 kV, 230 kV, and 500 kV.

The 500 kV transmission lines are jointly owned by JEA and FPL and complete the path, from FPL's Duval substation (to the west of JEA's system) to the Florida interconnect at the Georgia Integrated Transmission System (ITS). Along with JEA and FPL, Duke Energy Florida, and the City of Tallahassee each own transmission interconnections with the Georgia ITS. JEA's import entitlement over these transmission lines is 1,228 MW out of 3,200 MW.

The 230 kV and 138 kV transmission system provides a backbone around JEA's service territory, with one river crossing in the north and no river crossings in the south, leaving an open loop. The 69 kV transmission system extends from JEA's core urban load center to the northwest, northeast, east, and southwest to fill in the area not covered by the 230 kV and 138 kV transmission backbone.

JEA owns and operates four 230 kV tie-lines terminating at FPL's Duval substation in Duval County, one 230 kV tie-line terminating at FPL's Sampson substation (FPL metered tie-line) in St. Johns County, one 230 kV tie-line terminating at Seminole Electric Cooperative Incorporated's (SECI) Black Creek substation in Clay County, one 138 kV tie-line connecting Cedar Bay, an IPP located within JEA's bulk electric system, and one 138 kV interconnection with Beaches Energy Services' at JEA's Neptune Substation. This tie-line is owned and operated by Beaches Energy.

JEA also owns and operates a 138 kV transmission loop that extends from the 138 kV backbone north to the Nassau substation, where JEA delivers wholesale power to FPU for resale within the City of Fernandina Beach, Nassau County, Florida.

# 1.2.2 Transmission System Considerations

JEA continues to evaluate and upgrade the bulk power transmission system as necessary to provide reliable electric service to its customers. In compliance with North American Electric Reliability Corporation (NERC) and Florida Reliability Coordinating Council's (FRCC) standards, JEA continually assesses the needs and options for increasing the capability of the transmission system.

JEA performs system assessments using JEA's published Transmission Planning Process in conjunction with and as an integral part of the FRCC's published Regional Transmission Planning Process. FRCC's published Regional Transmission Planning Process facilitates coordinated planning by all transmission providers, owners, and stakeholders within the FRCC Region. FRCC's members include investor owned utilities, municipal utilities, a federal power

agency, power marketers, and independent power producers. The FRCC Board of Directors has the responsibility to ensure that the FRCC Regional Transmission Planning Process is fully implemented. The FRCC Planning Committee, which includes representation by all FRCC members, directs the FRCC Transmission Working Group, in conjunction with the FRCC Staff, to conduct the necessary studies to fully implement the FRCC Regional Transmission Planning Process. The FRCC Regional Transmission Planning Process meets the principles of the Federal Energy Regulatory Commission (FERC) Final Rule in Docket No. RM05-35-000 for: (1) coordination, (2) openness, (3) transparency, (4) information exchange, (5) comparability, (6) dispute resolution, (7) regional coordination, (8) economic planning studies, and (9) cost allocation for new projects.

# 1.2.3 Transmission Service Requirements

In addition to the obligation to serve native retail territorial load, JEA also has contractual obligations to provide transmission service for:

- the delivery of FPL's share of SJRPP energy output from the plant to FPL's interconnections,
- the delivery of Cedar Bay's energy output from the plant to FPL's interconnections; FPL
  purchased Cedar Bay and retired the generation in December 2016,
- the delivery of backup, non-firm, as-available tie capability for the Beaches Energy System.

JEA also engages in market transmission service obligations via the Open Access Same-time Information System (OASIS) where daily, weekly, monthly, and annual firm and non-firm transmission requests are submitted by potential transmission service subscribers.

#### 1.2.4 Distribution

The JEA distribution system operates at three primary voltage levels (4.16 kV, 13.2 kV, and 26.4 kV). The 26.4 kV system serves approximately 86 percent of JEA's load, including 75 percent of the 4.16 kV substations. The current standard is to serve all new distribution loads, except loads in the downtown network, with 26.4 kV systems. JEA has approximately 6600 miles of distribution circuits of which more than half is underground.

# 1.3 Demand Side Management

# 1.3.1 Interruptible Load

JEA currently offers Interruptible and Curtailable Service to eligible industrial class customers with peak demands of 750 kW or higher. Customers who subscribe to the Interruptible Service are subject to interruption of their full nominated load during times of system emergencies, including supply shortages. Customers who subscribe to the Curtailable Service may elect to voluntarily curtail portions of their nominated load based on economic incentives. For the purposes of JEA's planning reserve requirements, only customer load nominated for Interruptible Service is treated as non-firm. This non-firm load reduces the need for capacity planning reserves to meet peak demands. JEA forecasts 106 MW of interruptible peak load in both summer and winter, and remains constant throughout the study period. For 2017, the interruptible load represents 3.6 percent of the total peak demand in the winter and 3.8 percent of the forecasted total peak demand in the summer.

## 1.3.2 Demand-Side Management Programs

JEA continues to pursue a greater implementation of demand-side management programs where economically beneficial and to meet JEA's Florida Energy Efficiency and Conservation Act (FEECA) goals. JEA's demand-side management programs focus on improving the efficiency of customer end uses as well as improving the system load factor. To encourage efficient customer usage, JEA offers customers both education and economic incentives on more efficient end use technologies. For load factor improvement, JEA is planning the implementation of a Demand Rate Pilot program later this year with the intent of reducing peaks for residential customers. This pilot program is still in development and, as such, impacts are not reflected in Table 3. Electrification programs include on-road and off-road vehicles, forklifts, cranes and other industrial process technologies. JEA's forecast of annual incremental demand and energy reductions due to its current DSM energy efficiency programs is shown in Table 2. JEA's current and planned DSM programs are summarized by commercial and residential programs in Table 3.

Table 2: DSM Portfolio – Energy Efficiency Programs

	NUAL MENTAL	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Annual	Residential	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
Energy	Commercial	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3
(GWh)	Total	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4
Summer	Residential	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Peak	Commercial	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
(MW)	Total	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Winter	Residential	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Peak	Commercial	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
(MW) Total		4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7

Table 3: DSM Programs

Commercial Programs	Residential Programs
Commercial Energy Assessment Program	Residential Energy Assessment Program
Commercial Energy Efficient Products	Residential Energy Efficient Products
Commercial Prescriptive Program	Residential New Build
Custom Commercial Program	Residential Solar Water Heating
Commercial Solar Net Metering	Residential Solar Net Metering
Small Business Direct Install Program	Neighborhood Efficiency Program
Off-Road Electrification	Residential Efficiency Upgrade
Demand Rate Pilot (On Hold)	Electric Vehicles
	Demand Rate Pilot (In Planning)

# 1.4 Clean Power and Renewable Energy

JEA continues to investigate economic opportunities to incorporate clean power and renewable energy into JEA's power supply portfolio. To that end, JEA has implemented several clean power and renewable energy initiatives and continues to evaluate potential new initiatives.

## 1.4.1 Clean Power Program

From 1999 - 2014, JEA worked with the Sierra Club of Northeast Florida (Sierra Club), the American Lung Association (ALA), and local environmental groups through routine Clean Power Program meetings, as established in JEA's "Clean Power Action Plan" as a means of providing guidance and recommendations to JEA in the development and implementation of the Clean Power Programs.

Since the conclusion of this program, JEA has continued to make considerable progress related to clean power initiatives. This progress includes installation of clean power systems, unit efficiency improvements, nuclear and solar purchase power agreements, legislative and public education activities, and research and development of clean power technologies.

# 1.4.2 Renewable Energy

In 2005, JEA received a Sierra Club Clean Power Award for its voluntary commitment to increasing the use of solar, wind and other renewable or green power sources. Since that time, JEA has implemented new renewable energy projects and continues to explore additional opportunities to increase its utilization of renewable energy. JEA issued several Requests for Proposals (RFPs) for solar energy that resulted in new resources for JEA's portfolio. As discussed below, JEA's existing renewable energy sources include installation of solar photovoltaic (PV), solar thermal, and landfill gas capacity.

#### 1.4.2.1 Solar and the Solar Incentive

JEA has installed 35 solar PV systems, totaling 222 kW, on public high schools in Duval County, as well as many of JEA's facilities, and the Jacksonville International Airport. To further promote the acceptance and installation of solar energy systems, JEA implemented the Solar Incentive Program in early 2002. This program continues to provide rebates for the installation of solar thermal systems.

In addition to the solar thermal system incentive program, JEA established a residential net metering program to encourage the use of customer-sited solar PV systems, which was revised as the Tier 1 & 2 Net Metering policy in 2009, to include all customer-owned renewable generation systems up to and equal to 100 kW. In 2011, JEA established the Tier 3 Net Metering Policy for customer-owned renewable generation systems greater than 100 kW up to 2 MW. The 2014 updated policy defines Tier 1 as 10 kW or less, Tier 2 as greater than 10 kW – 100 kW, and Tier 3 as greater than 100 kW – 2 MW. All customer-owned generation in excess

of 2 MW is addressed in JEA's Distributed Generation Policy (see Section 1.1.2.4 Cogeneration). This net metering policy is capped at 10 MW for total generation, which is expected to be met by summer 2017. JEA is exploring options to create a viable solution for incoming solar customers after that cap has been reached.

JEA signed a purchase power agreement with Jacksonville Solar, LLC in May 2009 to provide energy from a 12 MW AC rated solar farm, which began operation in summer 2010 (see Section 1.1.2.2.1 Jacksonville Solar).

JEA issued three Solar PV RFPs between December 2014 and December 2015. JEA received a total of 73 bids and awarded 9 solar projects totaling 36.5 MW with terms between 20 to 30 years. Agreements have been finalized successfully for seven projects for a total of 27 MW. All these solar facilities are expected to be completed and operational by the beginning of 2018. One contract that was awarded was cancelled. JEA is still in contract negotiations on one other 5 MW project. Once signed, 32 of the possible 38 MW will have been subscribed.

## 1.4.2.2 Landfill Gas and Biogas

JEA owned three internal combustion engine generators located at the Girvin Road landfill. This facility was placed into service in July 1997, and has been fueled by the methane gas produced by the landfill. The facility originally had four generators, with an aggregate net capacity of 3 MW. Since that time, gas generation has declined and one generator was removed and placed into service at the Buckman Wastewater Treatment facility and Girvin was decommissioned in 2014.

The JEA's Buckman Wastewater Treatment Plant previously dewatered and incinerated the sludge from the treatment process and disposed of the ash in a landfill. The current facility manages the sludge using three anaerobic digesters and one sludge dryer to produce a pelletized fertilizer product. The methane gas from the digesters can be used as a fuel for the sludge dryer and for the on-site 800 kW generator.

JEA signed a Power Purchase Agreement with Trail Ridge Energy, LLC (TRE) in 2006 (Phase One) for 9 net MW of the gas-to-energy facility at the Trail Ridge Landfill in Duval County. In 2011, JEA executed an amendment to the Power Purchase Agreement (Phase Two) to purchase 9 additional MW from a gas-to-energy facility. LES has developed the Sarasota County Landfill in Nokomis, Florida (up to 6 net MW) to serve part of this Phase Two agreement. This portion of the Phase Two purchase began February 2015 (see Section 1.1.2.1 Trail Ridge Landfill).

#### 1.4.2.3 Wind

As part of its ongoing effort to utilize more sources of renewable energy, in 2004 JEA entered into a 20 year agreement with Nebraska Public Power District (NPPD) to participate in a wind generation project located in Ainsworth, Nebraska. JEA's participation in NPPD's wind generation project allows JEA to receive environmental credits (green tags) associated with this

green power project. Under the wind generation agreement, JEA purchases 10 MW of capacity from NPPD's wind generation facility. In turn, NPPD buys back the energy at specified on and off peak charges.

With the expansion of JEA's renewable portfolio within the State of Florida, additional landfill gas generation and new solar facilities, JEA and NPPD agreed to terminate the contract effective December 31, 2019.

#### 1.4.2.4 Biomass

In 2008, to obtain cost-effective biomass generation, JEA completed a detailed feasibility study of both self-build stand-alone biomass units and the co-firing of biomass in Northside 1 and 2. The JEA self-build projects would not have been eligible for the federal tax credits afforded to developers. The co-firing alternative for Northside 1 and 2 considered potential reliability issues associated with both of those units. Even though the price of petroleum coke has been volatile in recent past, petroleum coke prices are still forecasted to be lower than the cost of biomass on an as-fired basis. In addition, JEA conducted an analytical evaluation of specific biomass fuel types to determine the possibility of conducting a co-firing test in Northside 1 or 2.

In 2011, JEA co-fired biomass in the Northside Units 1 and 2, utilizing wood chips from JEA tree trimming activities as a biomass energy source. Northside 1 and 2 produced a total of 2,154 MWh of energy from wood chips during 2011 and 2012. At that time, JEA received bids from local sources to provide sized biomass for potential use for Northside Units 1 and 2. Currently, no biomass is being co-fired in Northside Units 1 and 2.

#### 1.4.3 Research Efforts

Many of Florida's renewable resources such as offshore wind, tidal, and energy crops require additional research and development before they can be implemented as large-scale power generating technologies. JEA's renewable energy research efforts have focused on the development of these technologies through a partnership with the University of North Florida's (UNF) Engineering Department. In the past, UNF and JEA have worked on the following projects:

- JEA with UNF, worked to quantify the winter peak reductions of solar hot water systems.
- UNF, in association with the University of Florida, evaluated the effect of biodiesel fuel in a utility-scale combustion turbine. Biodiesel has been extensively tested on diesel engines, but combustion turbine testing has been very limited.
- UNF evaluated the tidal hydro-electric potential for North Florida, particularly in the Intracoastal Waterway, where small proto-type turbines have been tested.
- JEA, UNF, and other Florida municipal utilities partnered on a grant proposal to the Florida Department of Environmental Protection to evaluate the potential for offshore wind development in Florida.

- JEA provided solar PV equipment to UNF for installation of a solar system at the UNF Engineering Building to be used for student education.
- JEA developed a 15 acre biomass energy farm where the energy yields of various hardwoods and grasses were evaluated over a 3 year period.
- JEA participated in the research of a high temperature solar collector that has the potential for application to electric generation or air conditioning.

Through Florida State University (FSU), JEA participated in The Sunshine State Solar Grid Initiative (SUNGRIN) which was a five-year project (2010-2015) funded under the DOE Solar Energy Technologies Program (SETP), Systems Integration (SI) Subprogram, High Penetration Solar Deployment Projects. The goal of the SUNGRIN project, which started in Spring 2010, was to gain significant insight into effects of high-penetration levels of solar PV systems in the power grid, through simulation-assisted research and development involving a technically varied and geographically dispersed set of real-world test cases within the Florida grid. JEA provided FSU with data from the output of Jacksonville Solar project.

In addition to these projects, in 2016 JEA pledged its support to the proposed Florida Alliance for Accelerating Solar and Storage Technology Readiness (FAASSTeR) project, which aims to grow solar capacity in FMEA member utility territories to over 10% by 2024. As proposed, the program will be led by Nhu Energy, Inc. and Florida Municipal Electric Association (FMEA), with partial funding from the DOE. The program will provide an opportunity to research solar and solar + storage opportunities prior to strategically implementing on the grid, taking into account Florida's unique load patterns and power systems.

#### 1.4.3.1 Generation Efficiency and New Natural Gas Generation

In the late 1990's, JEA began to modernize its natural gas/oil fleet of generating units by replacing inefficient steam units and inefficient combustion turbine units with more efficient natural gas fired combustion turbines and combined cycle units. The retirement of units and their replacement with an efficient combined cycle unit and efficient simple cycle combustion turbines at Brandy Branch, Kennedy, and Greenland Energy Center significantly reduces CO<sub>2</sub> emissions.

#### 1.4.3.2 Renewable Energy Credits

JEA makes all environmental attributes from renewable facilities available to sell in order to lower rates for our customers. JEA has sold environmental credits for specified periods.

#### 1.4.3.3 Energy Storage

JEA continues its efforts to demonstrate its commitment to energy efficiency and environmental improvement by researching energy storage as a means of mitigating excess generation.

# 2. Forecast of Electric Power Demand and Energy Consumption

Annually, JEA develops forecasts of seasonal peaks demand, net energy for load (NEL), interruptible customer demand, demand-side management (DSM), and the impact of plug-in electric vehicles (PEVs). JEA removes from the total load forecast all seasonal, coincidental non-firm sources and adds sources of additional demand to derive a firm load forecast.

JEA uses National Oceanic and Atmospheric Administration (NOAA) Weather Station - Jacksonville International Airport for the weather parameters, Moody's Analytics (Moody) economic parameters for Duval County, JEA's Data Warehouse to determine the total number of Residential Premise ID and CBRE Jacksonville for Commercial and Industrial total inventory square footages. JEA develops its annual forecast using SAS and Microsoft Office Excel.

JEA's Fiscal Year 2017 baseline forecast uses 10-years of historical data (2007 to 2016) which captured the pre-2008/09 economic downturn, the 2008/09 economic downturn and the post-recession recovery. Using the shorter periods also allows JEA to capture the more recent trends in customer behavior, energy efficiency and conservation, where these trends are captured in the actual data and used to forecast projections.

## 2.1 Peak Demand Forecast

JEA normalizes its historical seasonal peaks using historical maximum and minimum temperatures, 24°F as the normal temperature for the Winter peak and 97°F for the Summer peak. JEA then develops the seasonal peak forecasts using multiple regression analysis of normalized historical seasonal peaks, normalized historical and forecasted residential, commercial and industrial energy for Winter/Summer peak months, heating degree hour for the 72 hours leading to winter peak and cooling degree hours for the 48 hours leading to summer peak. JEA's forecasted Average Annual Growth Rate (AAGR) for total peak demand during the TYSP period is 0.56 percent for summer and 0.62 percent for winter, which reflects the expiration of FPU's wholesale agreement beginning 2018.

# 2.2 Energy Forecast

JEA begins its forecast process by weather normalizing energy for each customer class. JEA uses NOAA Weather Station - Jacksonville International Airport for historical weather data. JEA develops its normal weather using 20-year historical (FY95 to FY14) average heating/cooling degree days and maximum/minimum temperatures. Normal months, with heating/cooling degree days and maximum/minimum temperatures that are closest to the averages, are then selected. JEA updates its normal weather every 5 years or more frequently, if needed.

The residential energy forecast was developed using multiple regression analysis of weather normalized historical residential energy, Total Population, Medium Household Income from

Moody's Analytics, total residential Premise ID from JEA's Data Warehouse and JEA's residential electric rate.

The commercial energy forecast was developed using multiple regression analysis of weather normalized historical commercial energy, commercial inventory square footages, total population and gross product.

The industrial energy forecast was developed using multiple regression analysis of weather normalized historical industrial energy, total number of industrial employment and total retail sales product for existing industrial account. JEA then layers in the estimated energy for new industrial customers to the forecasted industrial energy.

The lighting energy forecast was developed using the historical actual energy, number of lightings and JEA's estimated High Pressure Sodium (HPS) to Light-Emitting Diode (LED) street light conversion schedule. The LEDs are estimated to use 45% less energy than the HPS street lights. JEA developed the forecasted number of lightings using regression analysis of number of JEA customers. The forecasted lighting energy was calculated using the forecasted number of lights, applied with the conversion of remaining HPS street lights to LED street lights starting and all new lightings to be LED street lights only.

JEA's forecasted AAGR for net energy for load during the TYSP period is 0.69 percent, which reflects the expiration of FPU's wholesale agreement beginning 2018.

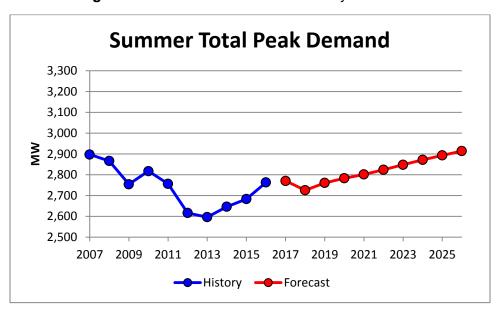


Figure 1: Summer Peak Demand History & Forecast

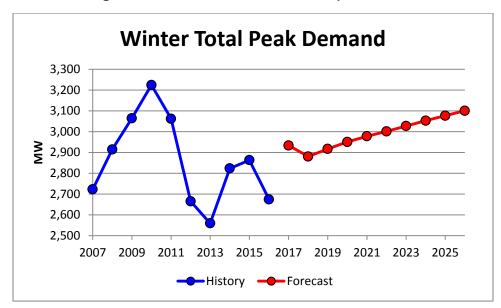
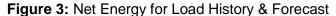
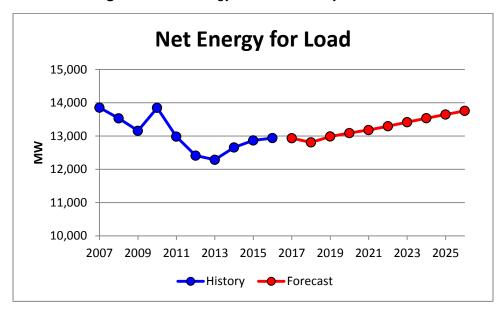


Figure 2: Winter Peak Demand History & Forecast





# 2.3 Plug-in Electric Vehicle Peak Demand and Energy

The PEVs demand and energy forecasts are developed using the historical number of PEVs in Duval County obtained from Florida Department of Highway Safety and Motor Vehicles (DHSMV) and the historical number of vehicles in Duval County from the U.S. Census Bureau.

JEA forecasted the numbers of vehicles in Duval County using multiple regression analysis of historical and forecasted Duval Population, Median Household Income and Number of Households from Moody's Analytics. The forecasted number of PEVs is modeled by using

multiple regression analysis of the number of vehicles and the U.S. Energy Information Administration (EIA) Annual Energy Outlook (AEO) 2016 average motor gasoline price.

The usable battery capacity (70% of battery capacity) per vehicle was determined based on the current plug-in vehicle models in Duval County, such as BMW, General Motors' Chevrolet and Cadillac, Honda, Fisker, Ford, Mitsubishi, Nissan, Porsche, Tesla, Toyota and Volvo. The average usable battery capacity per PEV is calculated using the average usable battery capacity of each vehicle brand and then assumes the annual growth of usable battery capacity per PEV by using historical 5 years average growth of 0.64 kWh. Similarly, the peak capacity is determined based on the average on-board charging rate of each vehicle brand and the forecast peak capacity per PEV grows by 0.25 kW per year.

JEA developed the PEVs daily charge pattern based on the U.S. Census 2013 American Community Survey (ACS-13) for time of arrival to work and travel time to work for Duval County. The baseline forecast assumed that charging will be once per day and uncontrolled charging (PEV start charging immediately upon returning home).

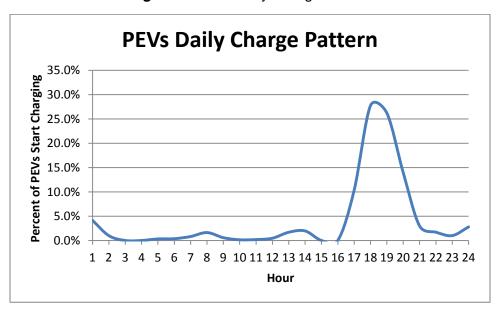


Figure 4: PEVs Daily Charge Pattern

The PEVs peak demand forecast is developed using the on-board charge rate for each model, the PEVs daily charge pattern and the total number of PEVs each year. The PEV energy forecast is developed simply by summing the hourly peak demand for each year. The table below shows the forecasted PEV peak and energy.

JEA's forecasted AAGR for PEV winter and summer coincidental peak demand are 20.9 percent and total energy is 20.9 percent during the TYSP period.

Schedule 2.1: History and Forecast of Energy Consumption and Number of Customers by Class

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Ru	ral and Residen	tial		Commercial			Industrial	
Year	GWH Sales	Average Number of Customers	Average kWh/ Customer	GWH Sales	Average Number of Customers	Average kWh/ Customer	GWH Sales	Average Number of Customers	Average kWh/ Customer
2007	5,507	358,918	15,591	4,399	42,119	96,392	2,630	222	12,855,251
2008	5,307	365,363	15,072	4,040	44,489	98,887	2,948	225	11,671,666
2009	5,319	365,872	14,506	4,024	45,093	89,591	2,643	231	12,776,809
2010	5,747	368,111	14,448	4,071	45,748	87,957	2,720	226	11,692,820
2011	5,237	369,051	15,572	3,927	46,192	88,137	2,682	223	12,192,004
2012	4,880	369,761	14,163	3,852	46,605	84,255	2,598	215	12,468,380
2013	4,852	372,430	13,102	3,777	47,127	81,735	2,589	218	11,906,357
2014	5,162	377,326	12,860	3,882	47,691	79,204	2,564	219	11,812,944
2015	5,197	383,998	13,443	4,001	49,364	78,642	2,579	215	11,951,824
2016	5,351	398,387	13,431	4,064	51,441	78,994	2,457	202	12,159,793
2017	5,245	403,959	12,985	4,078	52,169	78,162	2,589	203	12,754,418
2018	5,288	411,160	12,860	4,122	53,002	77,772	2,660	205	12,975,390
2019	5,335	418,103	12,761	4,159	53,792	77,309	2,747	206	13,333,739
2020	5,361	424,502	12,629	4,186	54,584	76,689	2,793	207	13,490,579
2021	5,391	430,690	12,516	4,225	55,378	76,286	2,808	207	13,565,925
2022	5,433	437,049	12,431	4,269	56,174	76,003	2,827	207	13,657,004
2023	5,482	443,533	12,360	4,313	56,972	75,707	2,848	207	13,758,683
2024	5,531	449,895	12,295	4,353	57,773	75,353	2,868	207	13,854,672
2025	5,583	455,978	12,244	4,393	58,576	74,998	2,880	207	13,912,789
2026	5,638	461,783	12,209	4,434	59,381	74,666	2,887	207	13,945,961

Schedule 2.2: History and Forecast of Energy Consumption and Number of Customers by Class

	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Year	Street & Highway Lighting	Other Sales to Ultimate Customers	Total Sales to Ultimate Customers	Sales For Resale	Utility Use & Losses	Net Energy For Load	Other Customers	Total Number of Customers
	GWH	GWH	GWH	GWH	GWH	GWH	(Avg. Number)	
2007	113	0	12,649	673	531	13,854	2	401,261
2008	117	0	12,413	619	499	13,531	6	410,083
2009	120	0	12,105	591	458	13,155	5	411,200
2010	122	0	12,660	617	569	13,846	2	414,086
2011	123	0	11,968	589	424	12,980	2	415,468
2012	123	0	11,452	423	537	12,411	2	416,583
2013	122	0	11,340	395	550	12,286	2	419,777
2014	105	0	11,713	472	472	12,656	2	425,238
2015	87	0	11,864	392	612	12,868	2	433,578
2016	77	0	11,949	490	498	12,937	2	450,032
2017	74	0	11,986	381	566	12,933	0	456,331
2018	69	0	12,139	102	566	12,807	0	464,367
2019	67	0	12,308	103	574	12,985	0	472,101
2020	66	0	12,406	103	580	13,089	0	479,293
2021	65	0	12,489	104	586	13,179	0	486,275
2022	67	0	12,596	105	592	13,293	0	493,430
2023	68	0	12,711	106	599	13,415	0	500,712
2024	69	0	12,822	106	605	13,533	0	507,875
2025	70	0	12,926	107	612	13,645	0	514,761
2026	71	0	13,029	108	618	13,755	0	521,371

Schedule 3.1: History and Forecast of Summer Peak Demand

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1	0)	(1	1)
Calendar Year	Total Demand	Interruptible Load	Load Mar	nagement	QF Load Served By QF	Cumu Conse		Net Firm Peak		Time C	of Peak	
I Gai	Demand	Load	Residential	Comm/Indu	Generation	Residential	Comm/Indu	Demand	Month	Day	H.E.	Temp
2007	2,897	0	0	0	0	0	0	2,897	8	7	170	97
2008	2,866	0	0	0	0	0	0	2,866	8	7	1600	96
2009	2,754	0	0	0	0	0	0	2,754	6	22	1600	98
2010	2,817	0	0	0	0	0	0	2,817	6	18	1700	102
2011	2,756	0	0	0	0	0	0	2,756	8	11	1700	98
2012	2,616	0	0	0	0	0	0	2,616	7	25	1700	95
2013	2,596	0	0	0	0	0	0	2,596	8	14	1600	93
2014	2,646	0	0	0	0	0	0	2,646	8	22	1600	99
2015	2,683	0	0	0	0	0	0	2,683	6	17	1600	97
2016	2,763	0	0	0	0	0	0	2,763	7	7	1700	98
2017	2,770	106	0	0	0	4	3	2,658				
2018	2,725	106	0	0	0	7	5	2,607				
2019	2,761	106	0	0	0	11	8	2,637				
2020	2,783	106	0	0	0	14	10	2,653				
2021	2,801	106	0	0	0	18	13	2,665				
2022	2,824	106	0	0	0	21	15	2,682				
2023	2,848	106	0	0	0	25	18	2,700				
2024	2,871	106	0	0	0	28	20	2,717				
2025	2,893	106	0	0	0	32	23	2,733				
2026	2,914	106	0	0	0	35	25	2,748				

**Note**: All projections coincident at time of peak.

Schedule 3.2: History and Forecast of Winter Peak Demand

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1	0)	(1	1)
Calendar Year	Total Demand	Interruptible Load	Load Mar	nagement	QF Load Served By QF		ulative rvation	Net Firm Peak		Time C	of Peak	
i cai	Demand	Load	Residential	Comm/Indu	Generation	Residential	Comm/Indu	Demand	Month	Day	H.E.	Temp
2007	2,722	0	0	0	0	0	0	2,722	1	30	800	28
2008	2,914	0	0	0	0	0	0	2,914	1	3	800	25
2009	3,064	0	0	0	0	0	0	3,064	2	6	800	23
2010	3,224	0	0	0	0	0	0	3,224	1	11	800	20
2011	3,062	0	0	0	0	0	0	3,062	1	14	800	23
2012	2,665	0	0	0	0	0	0	2,665	1	4	800	22
2013	2,559	0	0	0	0	0	0	2,559	2	18	800	24
2014	2,823	0	0	0	0	0	0	2,823	1	7	800	22
2015	2,863	0	0	0	0	0	0	2,863	2	20	800	24
2016	2,674	0	0	0	0	0	0	2,674	1	20	800	28
2017	2,933	106	0	0	0	3	2	2,823				
2018	2,880	106	0	0	0	6	4	2,765				
2019	2,917	106	0	0	0	8	6	2,797				
2020	2,950	106	0	0	0	11	8	2,825				
2021	2,978	106	0	0	0	14	10	2,848				
2022	3,001	106	0	0	0	17	11	2,867				
2023	3,027	106	0	0	0	20	13	2,888				
2024	3,052	106	0	0	0	22	15	2,909				
2025	3,076	106	0	0	0	25	17	2,928				
2026	3,100	106	0	0	0	28	19	2,947				

**Note**: All projections coincident at time of peak.

Schedule 3.3: History and Forecast of Annual Net Energy For Load

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Calendar Year	Total Energy for	Interruptible Load	Load Mai	nagement	QF Load Served By QF		ılative rvation	Net Energy for Load	Load Factor
Toal	Load	Load	Residential	Comm/Indu	Generation	Residential	Comm/Indu	101 Load	1 actor
2007	13,854	0	0	0	0	0	0	13,854	55%
2008	13,531	0	0	0	0	0	0	13,531	53%
2009	13,155	0	0	0	0	0	0	13,155	49%
2010	13,846	0	0	0	0	0	0	13,846	49%
2011	12,980	0	0	0	0	0	0	12,980	48%
2012	12,411	0	0	0	0	0	0	12,411	53%
2013	12,286	0	0	0	0	0	0	12,286	54%
2014	12,656	0	0	0	0	0	0	12,656	51%
2015	12,868	0	0	0	0	0	0	12,868	51%
2016	12,937	0	0	0	0	0	0	12,937	53%
2017	12,960	0	0	0	0	13	13	12,933	52%
2018	12,860	0	0	0	0	26	27	12,807	53%
2019	13,064	0	0	0	0	39	40	12,985	53%
2020	13,195	0	0	0	0	52	53	13,089	53%
2021	13,311	0	0	0	0	65	66	13,179	53%
2022	13,452	0	0	0	0	79	80	13,293	53%
2023	13,600	0	0	0	0	92	93	13,415	53%
2024	13,744	0	0	0	0	105	106	13,533	53%
2025	13,882	0	0	0	0	118	120	13,645	53%
2026	14,019	0	0	0	0	131	133	13,755	53%

Schedule 4: Previous Year Actual and Two Year Forecast of Peak Demand and Net Energy for Load By Month

(1)	(2)	(3)	(2)	(3)	(4)	(5)	(6)	(7)
	Actual	2016	Foreca	st 2017	Foreca	st 2018	Foreca	st 2019
Month	Peak	Net Energy						
	Demand	For load						
	(MW)	(GWH)	(MW)	(GWH)	(MW)	(GWH)	(MW)	(GWH)
January	2,674	1,083	2,823	1,053	2,765	1,039	2,797	1,055
February	2,575	951	2,597	913	2,545	901	2,574	915
March	1,928	921	2,009	955	1,968	944	1,991	959
April	2,192	926	2,002	935	1,965	925	1,986	939
May	2,310	1,107	2,417	1,103	2,371	1,091	2,398	1,108
June	2,743	1,268	2,547	1,198	2,498	1,184	2,526	1,202
July	2,763	1,393	2,619	1,303	2,569	1,288	2,598	1,308
August	2,672	1,335	2,658	1,284	2,607	1,270	2,637	1,289
September	2,450	1,180	2,493	1,153	2,446	1,141	2,473	1,159
October	2,137	987	2,298	1,041	2,258	1,036	2,282	1,045
November	1,813	868	2,203	959	2,165	956	2,186	965
December	1,891	918	2,390	1,036	2,349	1,032	2,373	1,041
Annual Peak/Total Energy	2,763	12,937	2,823	12,933	2,765	12,807	2,797	12,985

# 3. Forecast of Facilities Requirements

#### 3.1 Future Resource Needs

JEA evaluates future supply capacity needs for the electric system based on peak demand and energy forecasts, existing supply resources and contracts, transmission considerations, existing unit capacity changes, and future committed resources as well as other planning assumptions. The base capacity plan includes the addition of the purchased power agreement with MEAG for the future Vogtle Units 3 and 4, the retirement of SJRPP Units 1 and 2 in January 2018 and the expiration of FPU's agreement for wholesale power at the end of 2017. With these baseline assumptions, annual and/or seasonal capacity purchases are needed each year of this TYSP period beginning in 2018 (see Table 4).

Table 4a: Resource Needs after Committed Units - Summer

	Summer											
	Installed	Firm C	apacity	QF	Available	Firm Peak		rve Margin Before	Resei	ve Margin		
Year	Capacity	Import	Export	Qi	Capacity	Demand		ntenance	After M	laintenance		
	MW	MW	MW	MW	MW	MW	MW	Percent	MW	Percent		
2017	3,769	15	376	0	3,408	2,658	750	28%	750	28%		
2018	2,767	15	0	0	2,782	2,607	175	7%	175	7%		
2019	2,767	106	0	0	2,873	2,637	236	9%	236	9%		
2020	2,767	206	0	0	2,973	2,653	320	12%	320	12%		
2021	2,767	206	0	0	2,973	2,665	308	12%	308	12%		
2022	2,767	206	0	0	2,973	2,682	291	11%	291	11%		
2023	2,767	206	0	0	2,973	2,700	273	10%	273	10%		
2024	2,767	206	0	0	2,973	2,717	256	9%	256	9%		
2025	2,767	206	0	0	2,973	2,733	240	9%	240	9%		
2026	2,767	206	0	0	2,973	2,748	225	8%	225	8%		

					Winter					
	Installed	Firm C	apacity	QF	Available	Firm Peak		ve Margin Sefore		ve Margin
Year	Capacity	Import	Export	3	Capacity	Demand	_	ntenance	After M	laintenance
	MW	MW	MW	MW	MW	MW	MW	Percent	MW	Percent
2016 / 17	4,110	15	383	0	3,743	2,823	920	33%	920	33%
2017 / 18	3,090	15	0	0	3,105	2,765	340	12%	340	12%
2018 / 19	3,090	6	0	0	3,096	2,797	300	11%	300	11%
2019 / 20	3,090	106	0	0	3,196	2,825	371	13%	371	13%
2020 / 21	3,090	206	0	0	3,296	2,848	448	16%	448	16%
2021 / 22	3,090	206	0	0	3,296	2,867	429	15%	429	15%
2022 / 23	3,090	206	0	0	3,296	2,888	408	14%	408	14%
2023 / 24	3,090	206	0	0	3,296	2,909	387	13%	387	13%
2024 / 25	3,090	206	0	0	3,296	2,928	368	13%	368	13%
2025 / 26	3,090	206	0	0	3,296	2,947	349	12%	349	12%

Table 4b: Resource Needs after Committed Units - Winter

**Note:** Committed Capacity Additions:

- Vogtle Unit 3 June 2019
- Vogtle Unit 4 June 2020

JEA's Planning Reserve Policy defines the planning reserve requirements that are used to develop the resource portfolio through the Integrated Resource Planning process. These guidelines set forth the planning criteria relative to the planning reserve levels and the constraints of the resource portfolio.

JEA's system capacity is planned with a targeted 15 percent generation reserve level for forecasted wholesale and retail firm customer coincident one hour peak demand, for both winter and summer seasons. This reserve level has been determined to be adequate to meet and exceed the industry standard Loss of Load Probability of 0.1 days per year. This level has been used by the Florida Public Service Commission (FPSC) for municipalities in the consideration of need for additional generation additions.

To meet these Planning Reserve Policy requirements, JEA will acquire the needed capacity and associated energy as identified in Table 5. The Energy Authority (TEA), JEA's affiliated energy market services company, has negotiated combined cycle capacity and energy pricing with a source to meet JEA's identified annual need in 2018 and 2019. A purchased power agreement will be signed for the annual needs once definitive approvals for SJRPP's decommissioning are acquired.

JEA's Planning Reserve Policy establishes a guideline that provides an allowance to meet the 15 percent reserve margin with up to 3 percent of forecasted firm peak demand in any season from purchases acquired in the operating horizon. Because JEA's seasonal needs are greater than 3% of firm peak demand, TEA will acquire short-term seasonal market purchases for JEA no later than the season prior to the need. TEA actively trades energy with a large number of counterparties throughout the United States, and is generally able to acquire capacity and energy from other market participants when any of its members require additional resources.

Summer Winter Year Type (MW) (MW) 2017 2018 225 225 Annual 225 225 2019 Annual 2020 200 55 Seasonal 2021 200 Seasonal 2022 200 Seasonal 2023 200 25 Seasonal 2024 200 50 Seasonal 75 2025 200 Seasonal

Table 5: Purchased Power Capacity Need

#### 3.2 Resource Plan

100

Seasonal

200

2026

To develop the resource plan outlined in this TYSP submittal, JEA included a review of existing electric supply resources, forecasts of customer energy requirements and peak demands, forecasts of fuel prices and fuel availability, committed unit additions, existing capacity changes and annual and seasonal capacity purchase additions. All these factors considered collectively provide JEA with sufficient capacity to cover customer demand and reserves during this ten year period. Table 6 presents the ten year resource plan which meets JEA's strategic goals. Schedules 5-10 provide further detail on this plan.

Table 6: Resource Plan

Year	Resource Plan <sup>(1)(2)(3)</sup>
2017	
2018	SJRPP Sale to FPL Suspended (383 MW) <sup>(4)</sup> SJRPP Units 1 & 2 Retired (- 1020 MW) <sup>(4)</sup> Annual Combined Cycle Purchase (225 MW)
2019	Trail Ridge Contract Expires (- 9 MW) Annual Combined Cycle Purchase (225 MW) MEAG Plant Vogtle 3 Purchase (100 MW) (5)
2020	MEAG Plant Vogtle 4 Purchase (100 MW) (5)
2021	
2022	
2023	
2024	
2025	
2026	

# Notes:

- Cumulative DSM addition of 47 MW Winter and 60 MW Summer at time of peak by 2026.
- New Solar addition of 27 MW per signed agreements as of this update.
- See Seasonal Purchases in Table 5.
- SJRPP sales return and SJRPP Units 1 and 2 retired January 2018.
- After accounting for transmission losses, JEA expects to receive 100 MW in June 2019 and 100 MW in June 2020 for a total of 200 MW of net firm capacity from the Vogtle units under construction.

**Schedule 5**: Fuel Requirements

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
				Act	tual										
	Fuel	Type	Units	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
(1)	NUCLE	EAR													
(1)		TOTAL	TRILLION BTU	0	0	0	0	0	0	0	0	0	0	0	0
(2)	COAL	1)													
(2)		TOTAL	1000 TON	2,479	2,352	2,106	930	983	991	1,120	993	899	782	1,031	1,071
	RESID	UAL													
(3)		STEAM	1000 BBL	10	27	0	0	0	0	0	0	0	0	0	0
(4)		CC	1000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(5)		CT/GT	1000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(6)		TOTAL	1000 BBL	10	27	0	0	0	0	0	0	0	0	0	0
	DISTIL	LATE													
(7)		STEAM	1000 BBL	0	1	2	3	2	3	2	2	3	1	2	3
(8)		CC	1000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(9)		CT/GT	1000 BBL	5	6	3	30	22	10	10	31	38	18	28	13
(10)		TOTAL	1000 BBL	5	8	5	33	24	13	12	33	41	19	30	16
	NATUR	RAL GAS													
(12)		STEAM	1000 MCF	12,104	14,025	14,495	18,065	16,237	19,045	16,530	21,247	18,971	21,265	18,462	19,223
(13)		CC	1000 MCF	26,876	19,754	26,335	25,607	23,475	25,802	25,507	23,582	26,262	26,087	24,842	25,736
(14)		CT/GT	1000 MCF	2,400	4,593	2,776	5,153	4,984	4,542	5,255	6,819	6,864	6,280	7,666	5,248
(15)		TOTAL	1000 MCF	41,380	38,372	43,605	48,825	44,696	49,390	47,291	51,648	52,096	53,632	50,970	50,207
(4.0)	PETRO	DLEUM COK	Œ												
(16)		TOTAL	1000 TON	584	802	364	398	413	432	413	377	399	433	435	436
(17)	OTHER	OTHER (SPECIFY)													
(17)		TOTAL	TRILLION BTU	0	0	0	0	0	0	0	0	0	0	0	0

Note: (1) Coal includes JEA's share of SJRPP, JEA's share of Scherer 4, and Northside Coal.

Schedule 6.1: Energy Sources (GWh)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
				Act	ual										
	Fuel	Туре	Units	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
(1)	Firm Inter-Region	on Interchange <sup>(1)</sup>	GWH	935	1,363	0	1,777	2,269	1,590	1,909	1,945	1,997	1,969	1,981	2,062
(2)	NUC	LEAR	GWH	0	0	0	0	0	0	0	0	0	0	0	0
(3)	CO	<b>AL</b> <sup>(2)</sup>	GWH	5,132	4,580	4,994	2,504	2,672	2,731	2,873	2,648	2,493	2,362	2,779	2,855
(4)		STEAM		13	16	0	0	0	0	0	0	0	0	0	0
(5)	RESIDUAL	CC	GWH	0	0	0	0	0	0	0	0	0	0	0	0
(6)	RESIDUAL	СТ	GWH	0	0	0	0	0	0	0	0	0	0	0	0
(7)		TOTAL		13	16	0	0	0	0	0	0	0	0	0	0
(8)		STEAM		0	0	0	0	0	0	0	0	0	0	0	0
(9)	DISTILLATE	CC	GWH	0	0	0	0	0	0	0	0	0	0	0	0
(10)	DISTILLATE	СТ	GWH	1	2	1	13	9	4	4	13	16	7	12	5
(11)		TOTAL		1	2	1	13	9	4	4	13	16	7	12	5
(12)		STEAM		1,011	1,279	1,370	1,725	1,551	1,830	1,574	2,089	1,848	2,077	1,808	1,849
(13)	NATURAL	CC	GWH	3,983	2,977	4,141	4,004	3,644	4,039	3,988	3,703	4,122	4,089	3,893	4,030
(14)	GAS	СТ	GWH	215	415	246	465	449	407	475	625	632	574	702	476
(15)		TOTAL		5,209	4,672	5,757	6,194	5,643	6,276	6,037	6,417	6,602	6,740	6,404	6,355
(16)	NUG		GWH	0	0	0	0	0	0	0	0	0	0	0	0
(17)		HYDRO		0	0	0	0	0	0	0	0	0	0	0	0
(18)	RENEWABLES	LANDFILL GAS	GWH	81	75	130	123	52	52	52	52	52	52	52	47
(19)	KENEWABLES	SOLAR		20	24	36	82	82	82	81	81	80	80	79	79
(20)	TOTAL			101	99	166	205	133	133	132	132	132	132	131	126
(21)				1,475	2,206	2,016	2,114	2,259	2,356	2,224	2,138	2,176	2,323	2,339	2,352
(22)	OTHER (	SPECIFY)	GWH	0	0	0	0	0	0	0	0	0	0	0	0
(23)	NET ENERGY	FOR LOAD(3)	GWH	12,868	12,937	12,933	12,807	12,985	13,089	13,179	13,293	13,415	13,533	13,645	13,755

Note:

<sup>(1)</sup> Seasonal and Year-Round PPA starting in 2018 and Nuclear PPA from MEAG commencing in 2019 included in Firm Inter-Regional Interchange.

<sup>(2)</sup> Coal includes JEA's share of SJRPP, Scherer 4 and Northside Coal. SJRPP retires January 2018.

<sup>(3)</sup> May not add due to rounding.

Schedule 6.2: Energy Sources (Percent)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
				Act	ual										
	Fuel	Туре	Units	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
(1)	Firm Inter-Regi	on Interchange	%	7.3	10.5	0.0	13.9	17.5	12.1	14.5	14.6	14.9	14.6	14.5	15.0
(2)	NUCL	EAR	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(3)	COA	<b>AL</b> <sup>(1)</sup>	%	39.9	35.4	38.6	19.6	20.6	20.9	21.8	19.9	18.6	17.5	20.4	20.8
(4)		STEAM		0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(5)	RESIDUAL	CC	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(6)	KESIDOAL	СТ	/0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(7)		TOTAL		0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(8)		STEAM		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(9)	DISTILLATE	CC	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(10)	DISTILLATE	СТ	70	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0
(11)		TOTAL		0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0
(12)		STEAM		7.9	9.9	10.6	13.5	11.9	14.0	11.9	15.7	13.8	15.3	13.3	13.4
(13)	NATURAL	CC	%	31.0	23.0	32.0	31.3	28.1	30.9	30.3	27.9	30.7	30.2	28.5	29.3
(14)	GAS	СТ		1.7	3.2	1.9	3.6	3.5	3.1	3.6	4.7	4.7	4.2	5.1	3.5
(15)		TOTAL		40.5	36.1	44.5	48.4	43.5	47.9	45.8	48.3	49.2	49.8	46.9	46.2
(16)	NUG		%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(17)		HYDRO		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(18)	DENEWARI FO	LANDFILL GAS	0/	0.6	0.6	1.0	1.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3
(19)	RENEWABLES	SOLAR	%	0.2	0.2	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
(20)	TOTAL			0.8	0.8	1.3	1.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9
(21)	PETROLE	UM COKE	%	11.5	17.1	15.6	16.5	17.4	18.0	16.9	16.1	16.2	17.2	17.1	17.1
(22)	OTHER (S	SPECIFY)	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(23)	NET ENERGY	FOR LOAD <sup>(2)</sup>	%	100	100	100	100	100	100	100	100	100	100	100	100

Note:

<sup>&</sup>lt;sup>(1)</sup> Nuclear PPA from MEAG commencing in 2019 included in Firm Inter-Regional Interchange.

<sup>(2)</sup> Coal includes JEA's share of SJRPP, Scherer 4 and Northside Coal. SJRPP retires January 2018.

<sup>(3)</sup> May not add due to rounding.

Schedule 7.1: Summer Forecast of Capacity, Demand, and Scheduled Maintenance at Time of Peak

	Installed	Firm C	Firm Capacity		Available	Firm Peak	Reserve M	argin Before	Scheduled	Reserve I	Reserve Margin After	
Year	Capacity	Import	Export	QF	Capacity	Demand	Maint	enance	Maintenance	Maint	enance	
	MW	MW	MW	MW	MW	MW	MW	Percent	MW	MW	Percent	
2017	3,769	15	376	0	3,408	2,658	750	28%	0	750	28%	
2018	2,767	240	0	0	3,007	2,607	400	15%	0	400	15%	
2019	2,767	331	0	0	3,098	2,637	461	18%	0	461	18%	
2020	2,767	406	0	0	3,173	2,653	520	20%	0	520	20%	
2021	2,767	406	0	0	3,173	2,665	508	19%	0	508	19%	
2022	2,767	406	0	0	3,173	2,682	491	18%	0	491	18%	
2023	2,767	406	0	0	3,173	2,700	473	18%	0	473	18%	
2024	2,767	406	0	0	3,173	2,717	456	17%	0	456	17%	
2025	2,767	406	0	0	3,173	2,733	440	16%	0	440	16%	
2026	2,767	406	0	0	3,173	2,748	425	15%	0	425	15%	

Schedule 7.2: Winter Forecast of Capacity, Demand, and Scheduled Maintenance at Time of Peak

	Installed	Firm C	apacity	QF	Available	Firm Peak	Reserve Ma	argin Before	Scheduled		largin After
Year	Capacity	Import	Export	Q.F	Capacity	Demand	Mainte	enance	Maintenance	Mainte	enance
	MW	MW	MW	MW	MW	MW	MW	Percent	MW	MW	Percent
2017	4,110	15	383	0	3,743	2,823	920	33%	0	920	33%
2018	3,090	240	0	0	3,330	2,765	565	20%	0	565	20%
2019	3,090	231	0	0	3,321	2,797	525	19%	0	525	19%
2020	3,090	161	0	0	3,251	2,825	426	15%	0	426	15%
2021	3,090	206	0	0	3,296	2,848	448	16%	0	448	16%
2022	3,090	206	0	0	3,296	2,867	429	15%	0	429	15%
2023	3,090	231	0	0	3,321	2,888	433	15%	0	433	15%
2024	3,090	256	0	0	3,346	2,909	437	15%	0	437	15%
2025	3,090	281	0	0	3,371	2,928	443	15%	0	443	15%
2026	3,090	306	0	0	3,396	2,947	449	15%	0	449	15%

Schedule 8: Planned and Prospective Generating Facility Additions and Changes

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
				Fuel	Туре	Fuel T	ransport	_	Commercial/	Expected	Gen Max	Net Cap		
Plant Name	Unit No.	Location	Unit Type	Primary	Alternate	Primary	Alternate	Construction Start Date	In-Service or Change	Retirement/ Shutdown	Nameplate	Summer	Winter	Status
			7.	Timary	Alternate	Tilliary	Alternate	Allemale		Date	kW	MW	MW	
SJRPP	1	12-031	ST	BIT	PC	RR	WA			01/2018	679,600	(501)	(510)	Retired
SJRPP	2	12-031	ST	BIT	PC	RR	WA			01/2018	679,600	(501)	(510)	Relifed

**Note**: Net capability reflects JEA's 80% ownership of Power Park.

**Schedule 9:** Status Report and Specifications of Proposed Generating Facilities (2017 Dollars)

1	Plant Name and Unit Number:	
2	Capacity:	
3	Summer MW	
4	Winter MW	
5	Technology Type:	
6	Anticipated Construction Timing:	
7	Field Construction Start-date:	
8	Commercial In-Service date:	
9	Fuel:	
10	Primary	
11	Alternate	
12	Air Pollution Control Strategy:	
13	Cooling Method:	
14	Total Site Area:	
15	Construction Status:	
16	Certification Status:	None to Report
17	Status with Federal Agencies:	·
18	Projected Unit Performance Data:	
19	Planned Outage Factor (POF):	
20	Forced Outage Factor (FOF):	
21	Equivalent Availability Factor (EAF):	
22	Resulting Capacity Factor (%):	
23	Average Net Operating Heat Rate (ANOHR):	
24	Projected Unit Financial Data:	
25	Book Life:	
26	Total Installed Cost (In-Service year \$/kW):	
27	Direct Construction Cost (\$/kW):	
28	AFUDC Amount (\$/kW):	
29	Escalation (\$/kW):	
30	Fixed O&M (\$/kW-yr):	
31	Variable O&M (\$/MWh):	

**Schedule 10**: Status Report and Specification of Proposed Directly Associated Transmission Lines

1	Point of Origin and Termination	
2	Number of Lines	
3	Right of Way	
4	Line Length	
5	Voltage	None To Report
6	Anticipated Construction Time	
7	Anticipated Capital Investment	
8	Substations	
9	Participation with Other Utilities	

# 4. Other Planning Assumptions and Information

### 4.1 Fuel Price Forecast

JEA uses a diverse mix of fuels in its generating units. The fuel price projections include natural gas, coal, petroleum coke, uranium, residual fuel oil and diesel fuel.

The fuel price projections for natural gas, coal, and petroleum coke used in this forecast were developed based on long-term price forecasts from PIRA Energy Group. PIRA is an international consulting firm that specializes in global energy market research and intelligence. PIRA provides long-term price projections for fuels, power, freight and emissions in its Energy Price Portal through 2035.

The fuel price projections for diesel fuel used in this TYSP were developed based on those included in the U.S. Energy Information Administration (EIA) Annual Energy Outlook 2017 (AEO2017). AEO2017 presents projections of energy supply, demand, and prices through 2050. The AEO2017 projections are based on results from the EIA's National Energy Modeling System (NEMS). NEMS is a computer based energy-economy modeling system of U.S. energy markets. NEMS projects the production, imports, conversion, consumption, and prices of energy, subject to a variety of assumptions related to macroeconomic and financial factors, world energy markets, resource availability and costs, behavioral and technological choice criteria, technology characteristics, and demographics.

The price projections for emissions allowances are derived from JD Energy's most recent outlook. JD Energy is an independent energy and environmental price forecasting firm. JD Energy uses a proprietary Generation and Emissions Modeling System (GEMS) methodology that integrates independent macroeconomic, energy and emissions pricing projections to deliver forecasts and perspectives on the outlook for fuel, power and emissions markets.

Scherer 4 burns Powder River Basin (PRB) coal. Projections of the commodity price for PRB coal are based on PIRA's long-term projections for PRB coal. The transportation component of the delivered price projection was derived from existing contracts and escalated by an inflation rate of 2.1% thereafter. The inflation rate of 2.1% originates from the AEO2017.

SJRPP currently burns Colombian coal. Projections of the commodity price for Colombian coal are based on PIRA's long-term projections for Colombian coal. Current freight rates for 2017 waterborne delivery of Colombian coal were used for 2017 transportation cost.

Northside units 1 and 2 currently burn a blend of petroleum coke and coal. These units are projected to burn 60 percent petroleum coke and 40 percent coal during the forecast period. The Northside coal and petroleum coke price projections are based on PIRA's long-term Colombian coal forecast with a three year historical petroleum coke to coal price ratio applied to derive the petroleum coke price. The projected transportation costs to Northside Generating Station used the same 2017 freight rates for Colombia coal and escalated it using the AEO2017

inflation rate, with an additional transportation price adder given because of the shallower draft at its offloading facility.

Northside 3 is capable of operating on residual fuel oil as an alternative to natural gas. The projected prices for residual fuel oil are based on the AEO2017 price forecast for residual fuel oil delivered to the Florida Reliability Coordinating Council Region (FRCC).

JEA currently operates eight units utilizing natural gas as a primary fuel. These units are GEC GT1 and GT2, Brandy Branch GT1, CT2 and CT3, Northside 3, and Kennedy GT7 and GT8. The natural gas price projection reflects delivery to a Florida city gate based on PIRA's long-term Henry Hub price forecast and expected variable transportation costs on Florida Gas Transmission.

The 1970's-vintage combustion turbine units at Northside Generating Station (GT3, GT4, GT5, and GT6) burn diesel fuel as the primary fuel type. Five JEA units utilize diesel fuel as an alternative to natural gas: Kennedy GT7 and GT8 and Brandy Branch GT1, CT2, and CT3. GEC GT1 and GEC GT2 are capable of using diesel fuel as a backup fuel. Projections for the price of diesel fuel are based on current ultra-low sulfur diesel pricing and AEO2017 oil growth rate.

JEA has a purchase power agreement with MEAG for 200MW from Vogtle Units 3 and 4 currently under construction in Georgia with planned in-service dates of 2019 and 2020. The fuel price forecast accounts for the costs of mine-mouth uranium, enrichment and fabrication.

#### 4.2 Economic Parameters

This section presents the parameters and methodology used for economic evaluations as part of JEA's least-cost expansion plan to satisfy forecast capacity requirements throughout the TYSP period.

#### 4.2.1 Inflation and Escalation Rates

The general inflation rate, construction cost escalation rate, fixed O&M escalation rate, and nonfuel variable O&M escalation rate are each assumed to be 2.1 percent.

# 4.2.2 Municipal Bond Interest Rate

JEA performs sensitivity assessments of project cost to test the robustness of JEA's resource plan. Project cost includes forecast of direct cost of construction, indirect cost, and financing cost. Financing cost includes the forecast of long term tax exempt municipal bond rates, issuance cost, and insurance cost. For JEA's plan development, the long term tax exempt municipal bond rate is assumed to be 4.50 percent. This rate is based on JEA's judgment and expectation that the long term financial markets will return to historical stable behavior under more stable economic conditions.

#### 4.2.3 Present Worth Discount Rate

The present worth discount rate is assumed to be equal to the tax exempt municipal bond interest rate of 4.50 percent.

# 4.2.4 Interest During Construction Interest Rate

The interest during construction rate, or IDC, is assumed to be 4.50 percent.

# 4.2.5 Levelized Fixed Charge Rate

The fixed charge rate (FCR) represents the sum of a project's fixed charges as a percent of the initial investment cost. When the FCR is applied to the initial investment, the product equals the revenue requirements needed to offset the fixed charges during a given year. A separate FCR can be calculated and applied to each year of an economic analysis, but it is common practice to use a single, levelized FCR (LFCR) that has the same present value as the year-by-year fixed charge rate.

Different generating technologies are assumed to have different economic lives and therefore different financing terms. Simple cycle combustion turbines are assumed to have a 20 year financing term; while natural gas fired combined cycle units are assumed to be financed over 25 years. Given the various economic lives and corresponding financing terms, different LFCRs were developed.

All LFCR calculations assume the 4.50 percent tax exempt municipal bond interest rate, a 1.00 percent bond issuance fee, and a 0.50 percent annual property insurance cost. The resulting 20 year fixed charge rate is 8.265 percent and the 25 year fixed charge rate is 7.312 percent.

# 5. Environmental and Land Use Information

JEA does not have any capacity build projects underway or planned for the term of this Ten Year Site Plan. Therefore, there are no potential sites in which to report environmental and land use information.