

Special Committee on the Potential Sale of JEA

AGENDA

Thursday, April 5, 2018
3:30 PM
Council Chambers 1st Floor, City Hall

Tape No. _____

Carol Owens, Chief of Legislative Services

Councilmembers

John R. Crescimbeni, Chair

Danny Becton
Anna Lopez Brosche
Garrett Dennis
Joyce Morgan
Greg Anderson
Aaron L. Bowman
Lori N. Boyer
Katrina Brown
Reginald L. Brown

Doyle Carter
Al Ferraro
Reggie Gaffney
Bill Gulliford
Tommy Hazouri
Jim Love
Samuel Newby
Matt Schellenberg
Scott Wilson

Staff

Legislative Assistant: Staci Lopez
Legislative Assistant: Mia Richardson
Research Asst.: Jeff Clements

Council Auditors Office: Kyle Billy
Council Auditors Office: Phillip Peterson
Office of General Counsel: Peggy Sidman

Meeting Convened:
Meeting Adjourned:

-
1. Call Meeting to Order
 2. Introductions
 3. Reports from JEA — Paul McElroy
 - Summary of Plant Vogtle (Tab 1)
 - St. Johns River Power Park (Tab 2)
 - Five year revenue projections for all current and future business lines; five year capital costs for new or expanded business lines (Tab 3)
 - Residential and commercial utility rate comparison for uniformity (Tab 4)
 - Employee volunteerism, community giving and value of partnerships with local service organizations (Tab 5)
 - Five year capital projections for all business lines (Tab 6)

Please bring your JEA notebook to the next meeting!



4. Reports from the Council Auditor – Kyle Billy

- **Purchase value of JEA assets in St. Johns County and Nassau County**
- **Update on IOU's that prevailed at Value Adjustment Boards**
- **Origin and difference for charging the Public Service Tax and the Franchise Fee**
- **Application of Franchise Fee to JEA electric customers**
- **Estimated net proceeds (from sale) separated for electric and for water/sewer**

5. Update on independent Special Committee advisor – Council President Anna Lopez Brosche

6. Announcements

7. Adjourn

***Note: RULE 4.505 DISRUPTION OF MEETING** No member of the audience shall applaud nor make any noise or remarks that are audible to the Committee that would indicate approval or disapproval of anything being discussed.*

****Note: Other Items may be added at the discretion of the chair.****
The next special committee meeting date will be Thursday, April 12, 2018 at 3:30 PM.



**Materials to assist the
City Council Special Committee on the Potential Sale of
JEA**

April 5, 2018

JEA Action Items for 4-5-18 JEA Special Committee Meeting

Tab 1

- Paul McElroy – summary of Plant Vogtle investment decision

Tab 2

- Council Member Ferraro – impact of St. Johns River Power Park decommissioning on the financial and employee figures presented in the various documents.
- Council Member Ferraro – what would it cost to keep SJRPP in operation and last 5-10 years of output as a percentage of JEA's total output; also mention CO2 impact and cost to meet environmental mandates

Tab 3

- Chairman Crescimbeni - 5-year revenue projections for all of the JEA's current and potential business lines
- Council Member Schellenberg - Capital costs of potential new or expanded revenue streams

Tab 4

- Council Member Becton – JEA to report on whether the various statewide rate comparisons previously presented are uniform base rates only (do they or don't they include surcharges and other add-ons such as storm cost recovery surcharges).
 - This section also includes an analysis requested by Council Vice President Bowman for a comparison of business rates.

Tab 5

- Chairman Crescimbeni – total hours of employee volunteerism and projects in which participated, including hours covered by comp time and value of employee donated hours not receiving comp time; does JEA contribute financially to sponsorship of community events (World of Nations, River Run, Earth Day, etc.).
- Chairman Crescimbeni – value of partnership with Catholic Charities, Lutheran Social Services, etc. to provide assistance to disadvantaged citizens; sponsorship of community events.

Tab 6

- Paul McElroy – provide JEA's 10 year capital plan
 - 5 year capital plan is provided

Other items

- Chairman Crescimbeni – JEA to provide a table of contents for the boxes of documents and the computer flash drive submitted in response to the subpoena
A CD is enclosed with a table of contents.
- Council Member Hazouri – wants a response from JEA to the Council Auditor's recent valuation report about anything that needs to be corrected or clarified.
JEA finds no items in the Council Auditor's report to be corrected or clarified.
- Council Member Gulliford - Potential impact of electric deregulation on JEA's future – how concerned is JEA?
JEA does not want to speculate on any potential impacts from deregulation.

Items for follow-up at a future meeting

- Council Member Morgan – what grants has JEA received over the last few years, for what purposes, and are there grants available for helping infrastructure in older neighborhoods.
- Council Member Becton - If JEA could make any Charter provisions go away, what would they want to do to increase shareholder value over the next 5, 10, 20 years in the face of declining traditional revenues.
- Council Member Becton – breakout of JEA’s various generating sources and their capacities
- Council Member Boyer – reconciliation of electric and water sales growth rates for different purposes (PSC filing vs. internal planning purposes).
- Chairman Crescimbeni – McElroy to provide a list of JEA’s awards and accomplishments
- Council Member Becton – how are other utilities diversifying their business lines to keep growing?
- Council Member Hazouri – compare JEA to Tampa Electric in terms of what makes a utility attractive or not to a potential buyer; what made them attractive to a buyer that JEA might not have?

Plant Vogtle

2008 - 2018



Plant Vogtle Decision Factors

The following decision factors related to the Plant Vogtle Units 3 and 4 PPA are addressed:

- Growth Rate and Expected Need
- Natural Gas Prices
- Carbon Dioxide Legislation
- Nuclear Industry
- Partners and Contractors

For each, the conditions now and at the time of the decision in 2008 are discussed.

Growth Rate and Expected Need

- Following the economic downturn of 2010-2012, JEA's actual 2016 peaks were 20-28 percent lower than forecasted in 2008. Total net energy in 2016 was similarly 30 percent short of the 2008 projection, as seen in the table below:

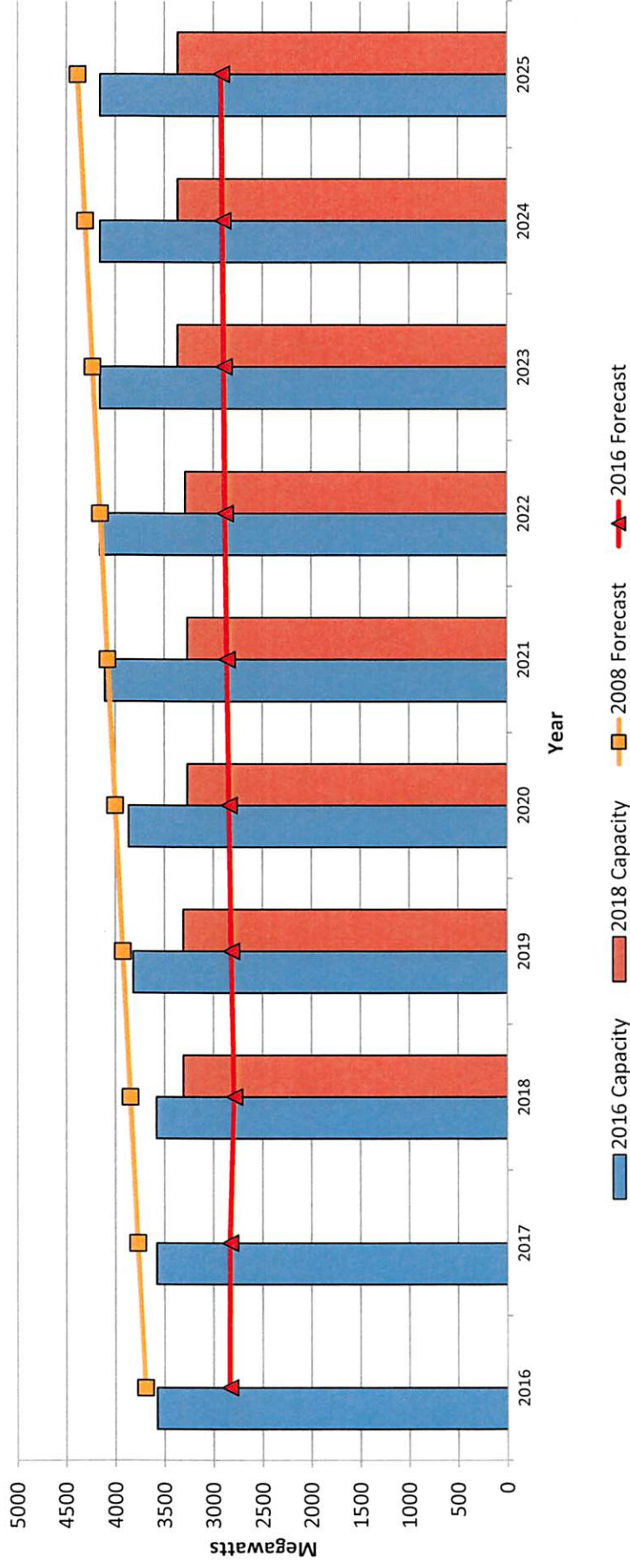
	2008	2016
Average Annual Growth Rate - Peak	2%	0.8%
Average Annual Growth Rate - Energy	2%	0.8%
2016 Peak	<u>Projected</u> 3,700 (winter) 3,500 (summer)	<u>Actual</u> 2,700 (winter) 2,800 (summer)
2016 Energy	<u>Projected</u> 17,500 GWh	<u>Actual</u> 12,900 GWh



Growth Rate and Expected Need

- The Chart below shows the 2008 peak forecast (gold line), and how the generating fleet would have met that peak. The red line shows the 2016 forecast, and the excess generation that was in place (blue bars), and the now right-sized fleet (red bars).

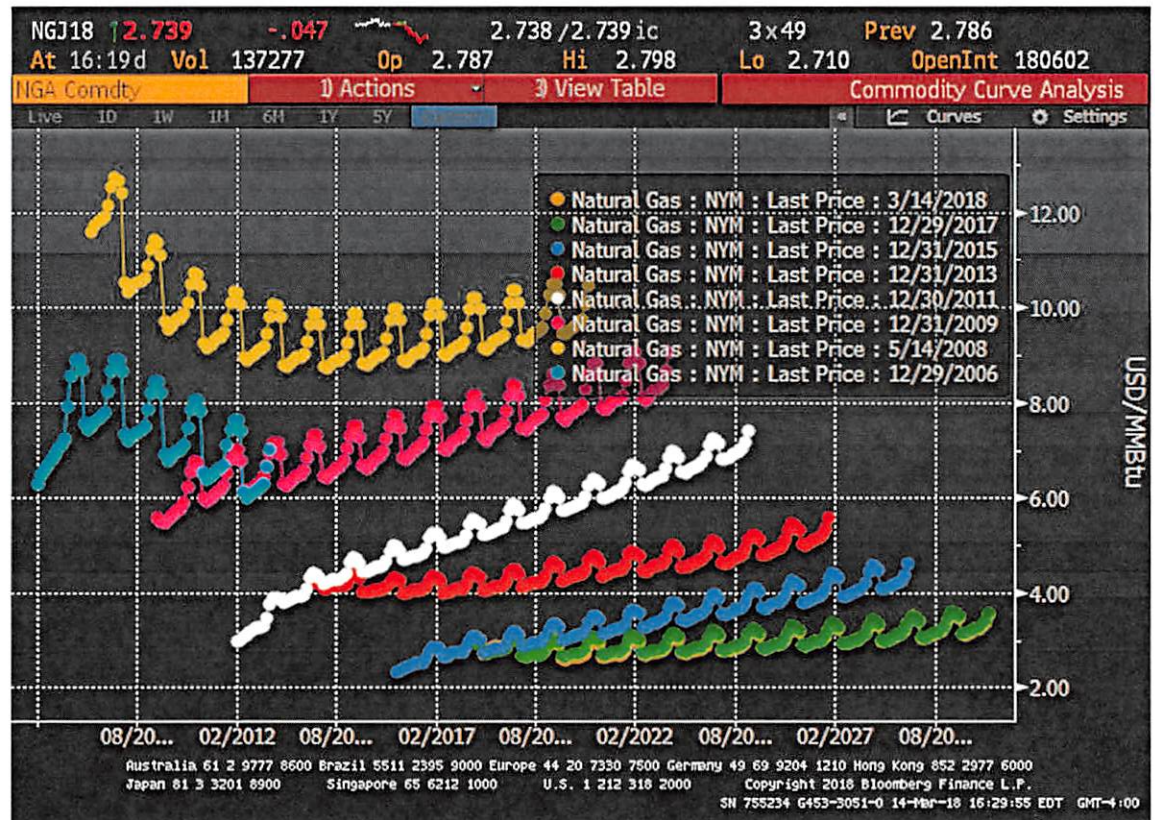
Capacity and Winter Peak Forecast



Natural Gas Prices

The gold colored curve represents the forecasted natural gas prices in 2008, which were over \$10/MMBtu and expected to stay above \$8/MMBtu for the foreseeable future.

Since then, as a result of the implementation of shale gas recovery technologies, natural gas prices have fallen dramatically. The green curve shows the 2017 natural gas price forward curves. Natural gas is now below \$3/MMBtu, and expected to stay there until the mid 2020s.



Carbon Dioxide Legislation

2008

In 2005 Regional Greenhouse Gas Initiatives started.

In 2007, Gov. Crist signed Florida Executive Order 07-127, setting limits on utilities carbon dioxide emissions.

In 2009 the Waxman-Markey bill passed the House of Representatives. Called for a cap and trade system for carbon dioxide emissions, and implemented renewable standards.

It never passed the Senate, and its failure led to the EPA's Clean Power Plan administrative (rather than legislative) approach to carbon regulation.

2018

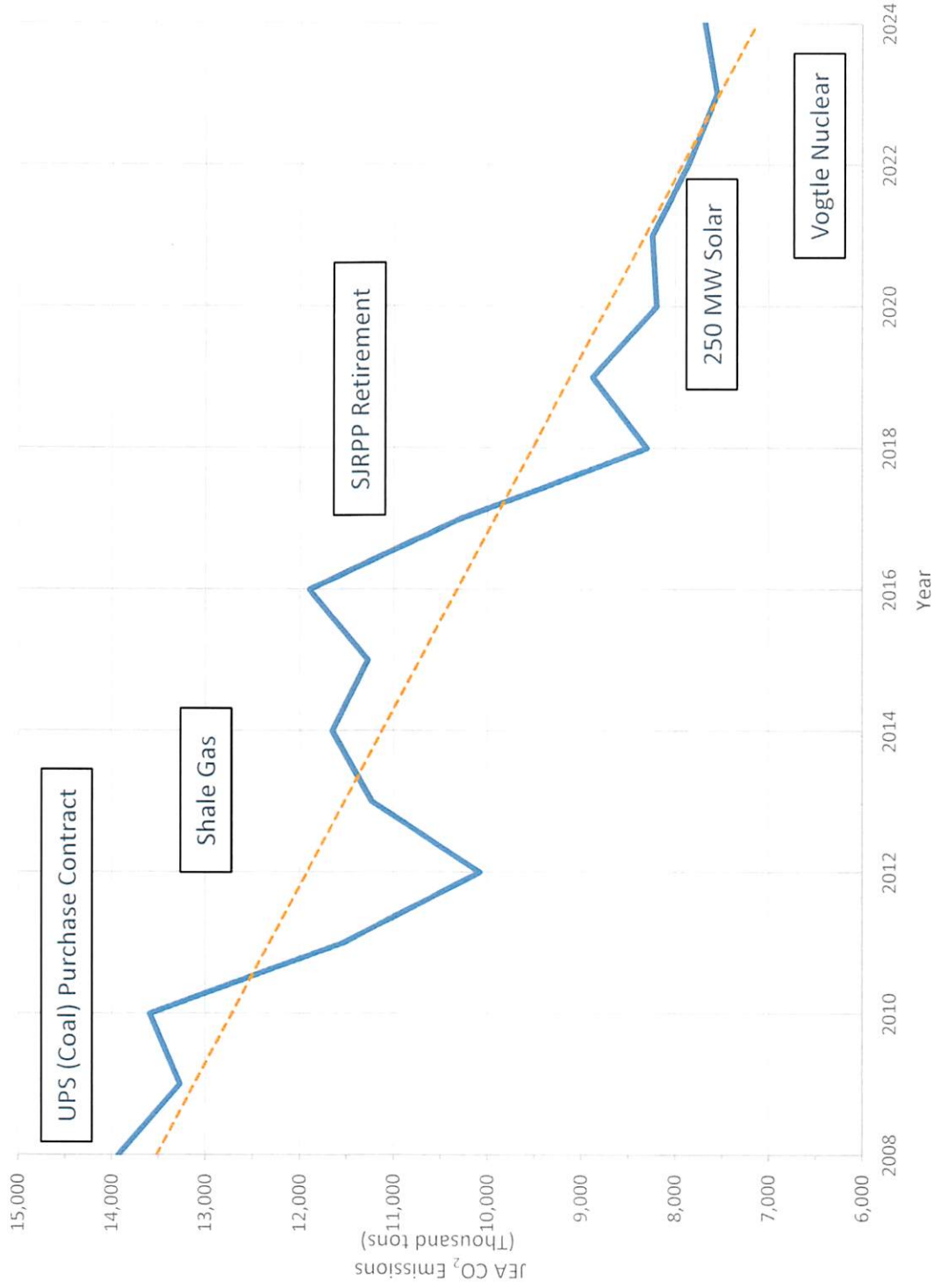
Carbon legislation has been largely rejected at the national level.

Low natural gas prices, however, have driven shifts from solid fuel to natural gas combined cycle power plants that have largely met or exceeded many of the goals of carbon dioxide legislation.

Costs for wind and solar energy have dropped drastically, and adoption has further lowered the national carbon emissions. As a result, there are currently no projected carbon penalties in the US.

JEA CO₂ Emissions - 2008 to 2024

- 6.25M tons CO₂/year decrease from 2008 to 2024 (45%)
- Equivalent to removing 1.2M cars from the road
- Retirement of SJRPP and the addition of 50MW solar is estimated to provide a 26% decrease from 2017 to 2018
- Addition of 250MW Solar and Plant Vogtle (2020-2025) further reduce CO₂ by 5%



Nuclear Industry

2008

- Nuclear Renaissance started
- Westinghouse Design – Rev. 15
- Vogtle COL Application submitted
- US Government Support (BABs, DOE Loans)

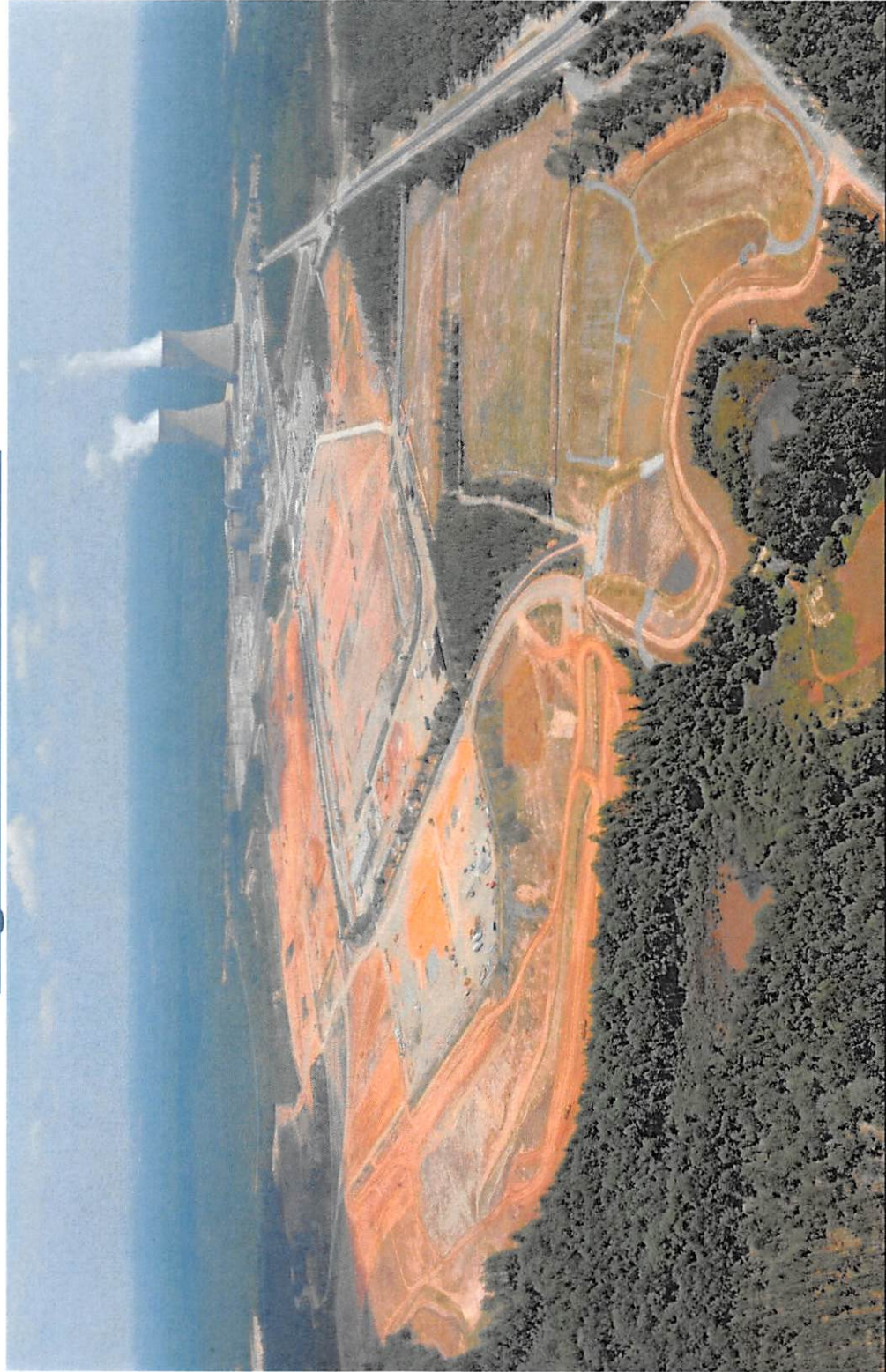
2018

- Nuclear Renaissance stalled
- Westinghouse Design – Rev. 19 approved 12/11
- Vogtle COL Application approved 2/12
- US Government Support – DOE Loans, BABs, Production Tax Credits

	2008	2018
Number of Nuclear Plants Under Construction/Licensing	28	4 (Vogtle and FPLs Turkey Point)
Number of AP1000s Under Construction/Licensing	14	4

Nuclear Industry

Vogtle 3&4 Site - 2009



Plant Vogtle Aerial Shot of Construction for Units 3 & 4 July 2009

© 2010 The Southern Company



Nuclear Industry

Vogtle 3 & 4 Site - 2018



Vogtle Units 3 and 4 northeast side

March 2018

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Partners and Contractors

2008

- Engineering, Procurement, and Construction Consortium of Westinghouse and Shaw/Stone & Webster – both over 100 years old with deep nuclear roots.
- Westinghouse owned by Toshiba – very stable Japanese conglomerate
- Municipal Electric Authority of Georgia – partner on many PPAs and spot purchases to provide power from Georgia.
- Southern Nuclear – Experienced nuclear utility with six operating plants.
- EPC agreement was largely fixed price – risk was with the consortium.

2018

- Shaw/Stone & Webster bought by CB&I, who was in turn bought by Westinghouse (after CB&I financial difficulties).
- Westinghouse bankruptcy March 2017. Abandoned EPC Contract.
- Toshiba, on brink of bankruptcy, agreed to meet parent guarantee obligation.
- Toshiba paid \$3.68B to co-owners by December, 2017.
- Project continues, with Westinghouse as Engineer, under time and materials contract, and Bechtel as Construction Manager. Southern Nuclear has overall control of project.



Supplemental Slides



JEA CO₂ Emissions – 2008 to 2024

Year	Thousand Tons CO ₂	Decrease from 2008 (Thousand Tons CO ₂)	Percent Decrease from 2008	Equivalent Number of Cars	Milestone
2008	13,930	--	--		
2009	13,272	658	5%		
2010	13,593	337	2%		UPS Contract Expires
2011	11,530	2,400	17%	461,523	
2012	10,076	3,854	28%	741,123	Shale Gas Impact Starts
2013	11,230	2,699	19%	519,111	
2014	11,652	2,278	16%	438,037	
2015	11,274	2,656	19%	510,809	
2016	11,898	2,032	15%	390,714	
2017	12,012	1,918	14%	368,878	
2018	8,301	5,628	40%	1,082,393	SJRPP Retirement, 50 MW Solar
2019	8,880	5,049	36%	971,018	
2020	8,199	5,730	41%	1,102,005	+250 MW Solar (300 MW total)
2021	8,245	5,685	41%	1,093,189	
2022	7,860	6,070	44%	1,167,305	Vogtle Unit 3 (100 MW)
2023	7,551	6,379	46%	1,226,649	Vogtle Unit 4 (100 MW)
2024	7,677	6,253	45%	1,202,420	



McElroy, Paul E. - Managing Director CEO

From: McElroy, Paul E. - Managing Director CEO
Sent: Monday, January 23, 2017 2:38 PM
To: 'Tom Petway'; 'Ed Burr'; 'Delores Kesler'; 'Cumber, Husein'; Flanagan, Kelly (flanagank@nfl.jaguars.com); 'Alan Howard'; 'Newbill32218@yahoo.com'
Cc: Dykes, Melissa H. - Chief Financial Officer; Charleroy, Melissa M. - Executive Assistant
Subject: FW: Plant Vogtle Update Memo_January 2017
Attachments: Plant Vogtle Update Memo_January 2017.docx

Board Members,

In 2008, JEA's Board established a 2018 target to produce 10 percent of JEA's energy requirements from non-carbon, nuclear electric generating sources. In May 2008, JEA entered into a power purchase agreement (PPA) with the Municipal Electric Authority of Georgia (MEAG) for an estimated 206 MW of capacity and related energy from MEAG's interest in Vogtle Units 3 and 4 (Project J). Plant Vogtle Units 3 and 4 (Project J) are nuclear electric generation facilities under construction in Waynesboro, GA. The project lead and majority owner of Plant Vogtle is Georgia Power and Southern (Company) Nuclear. The construction contract is with Westinghouse, a US subsidiary of Toshiba. Thus, Toshiba is the counter-party on the Vogtle project and the primary reason for this update.

Over the last thirty days Toshiba has announced a series of very significant accounting charges which were initially due to Westinghouse nuclear operations, and most recently due to Toshiba's LNG business. These announcements have taken a very heavy toll on Toshiba's balance sheet and overall financial position. The attached memo provides you with background information, important information regarding some positive activities taken in 2015 and early 2016, as well as a post December 2017 Toshiba update. Also included in the memo is the draft disclosure language we plan on using to update the POS (Preliminary Official Statement) sent to you on January 19th.

Please feel free to call with any questions.

Paul



Building Community

INTER-OFFICE MEMORANDUM

January 23, 2017

SUBJECT: UPDATE: PLANT VOGTLE – TOSHIBA

FROM: Paul E. McElroy, Managing Director/CEO

TO: JEA Board of Directors

PROJECT BACKGROUND:

In 2008, JEA's Board established a target to acquire 10 percent of JEA's energy requirements from nuclear sources by 2018. In May 2008, JEA entered into a power purchase agreement with the Municipal Electric Authority of Georgia (MEAG) for an estimated 206 MW of capacity and related energy from MEAG's interest in Vogtle Units 3 and 4 (Project J). The 206 MW will represent approximately 13 percent of JEA's estimated total energy requirements in the year 2020, when the Unit 4 is expected to be completed. JEA's participation in the Additional Vogtle Units PPA will provide fuel diversity to JEA's sources of energy with a fuel source that has no carbon dioxide emissions.

The original in-service dates for Vogtle Units 3 and 4 were April 2016 and 2017, respectively. Following a series of construction delays and a settlement with the contractor, the current contractual guaranteed completion dates are now June 2019 and 2020. Under the PPA, JEA is entitled to approximately 9.35 percent of capacity and related energy from each unit for a 20-year term commencing on each unit's commercial operation date and is required to pay for its output share on a "take-or-pay" basis (that is, whether or not either unit is completed or is operating or operable). Payments for the portion of the PPA associated with the repayment of principal maturing prior to commercial operation began in 2016, and are fully funded through the current completion dates through a rate stabilization fund created in 2014.

2015 to 2016 STATUS:

In December 2015, Westinghouse, the project designer and equipment manufacturer, acquired Stone & Webster Inc., the project EPC provider, from Chicago Bridge & Iron. At the same time, Westinghouse entered into the settlement agreement referenced above with the co-owners to resolve all the outstanding associated legal claims. Certain obligations of the new owner are guaranteed by its parent, Toshiba Corporation. Additionally, Westinghouse provided the Vogtle co-owners with \$920 million in letters of credit from two major Japanese banks.

The settlement agreement amended the EPC Contract to include the following:

- Restricted Westinghouse's ability to seek further increases in the contract price;
- Provided for enhanced dispute resolution procedures;
- Revised the guaranteed substantial completion dates to June 30, 2019 for Unit 3 and June 30, 2020 for Unit 4;
- Provided that delay liquidated damages will now commence from the current estimated nuclear fuel loading date for each unit, which is December 31, 2018 for Unit 3 and December 31, 2019 for Unit 4; and
- Provided for a settlement payment to Westinghouse (Project J's share is \$71 million).

JEA's recently approved rate restructuring positions JEA to fully absorb Vogtle costs, even in the very extreme and highly unlikely event it never operates. It would have a fuel rate impact in the future due to the cost of replacement energy from higher fuel cost capacity sources.

POST DECEMBER 25, 2016 STATUS:

On December 27, 2016, Toshiba announced that the Westinghouse acquisition of Stone & Webster will cost "several billion" more USD than anticipated. This has a material impact on Toshiba's prospects, and may lead to cost increases or further delays at the Vogtle Unit 3 and 4 construction project. On December 28, 2016, Toshiba Corporation was downgraded by Moody's from B3 to Caa1. Standard & Poor's downgraded Toshiba's rating to B- from B.

On January 19, 2017, the Nikkei newspaper, Kyodo News, reported that the Toshiba loss may reach 700 billion yen (approx. \$6.2 billion USD), substantially higher than the 500 billion yen maximum (approx. \$4.4 billion USD) that Toshiba had flagged to its lenders earlier this month. Reflecting these announcements, Toshiba's common stock has dropped 48% from its 12-month high on December 14, 2016. Toshiba's total equity position was \$6.9 billion USD as of September 30, 2016.

With its common stock already reeling from the Westinghouse nuclear business, this past Friday it was announced that Toshiba is seeking assistance from one of the world's largest buyers of LNG, Japan's JERA Co., to avoid billions of dollars in losses if it cannot sell American natural gas. The Company is working with JERA to help it find buyers for gas it has a contract to liquefy in the U.S. starting in 2019. Since Toshiba has yet to secure long-term contracts, it may be forced to sell the LNG in the spot markets at a loss – or could elect not process the gas at all. In either event, it will incur fixed tolling fees. According to Bloomberg calculations, the tolling fees under its long-term contract with Freeport LNG Development LP could be as much as \$8.2 billion USD. Toshiba is in discussions with its auditors regarding the provisioning of the Freeport LNG, such as booking it incrementally over the 20-year contract term per the Bloomberg report.

In slightly more positive news, it was also announced this past Friday that BlackRock has increased its equity ownership position in Toshiba to 5%, likely making it the Company's largest shareholder. Further, Toshiba is considering the sale of a non-controlling interest in its high performing memory chip business, as well as other non-core assets, to provide much needed liquidity and avoid the potential for a negative net worth position. According to a Reuters report on January 23, 2017, it appears that Toshiba's primary banks, Sumitomo Mitsui Banking Corp., Mizuho Bank Ltd. and Bank of Tokyo Mitsubishi UFJ Ltd. will wait until at least the end of February to call outstanding loans.

JEA PROSPECTIVE BOND OFFERING:

The credit ratings recently assigned to JEA's prospective bond offering reflect an analysis of the Toshiba developments through the date of the credit rating reports. On January 19th, a draft JEA Electric System Preliminary Official Statement ("POS") was distributed for your review. You will recall that the bond refinancing transaction is a component of the rate restructuring plan. Based upon announcements over the past several weeks from Toshiba, we have prepared additional disclosure language to be included in the final POS which is expected to be mailed on Wednesday, January 25th. The draft language (which remains under review by JEA Bond Counsel and Underwriters' Counsel) is as follows:

Georgia Power has advised MEAG that Contractor's performance and progress in recent months, primarily associated with Unit 3, has resulted in additional current schedule pressure of approximately three to four months and has increased the likelihood of further schedule impacts to that unit. Georgia Power expects the Contractor to employ mitigation efforts to maintain the current project schedule and believes the Contractor is responsible for any related costs under the Vogtle 3 and 4 Agreement. Georgia Power has also advised MEAG that the Contractor's

progress on Unit 4 indicates that the current estimated in-service date of June 2020 remains achievable.

On December 27, 2016, Toshiba Corporation 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.

Toshiba also reported that Westinghouse, in accordance with US GAAP, 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 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 business results. 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.

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.

We will keep you apprised of further developments as information becomes available.

Paul E. McElroy, Managing Director/CEO

PEM/MHD

Attachment A - JEA and Plant Vogtle Units 3 and 4

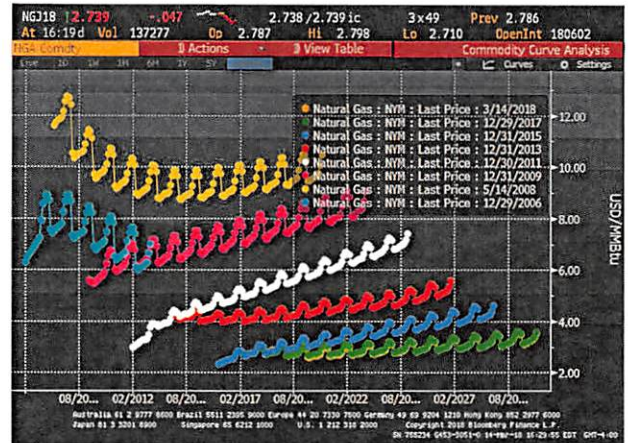
This memorandum briefly discusses the factors involved in the decision in 2008 to enter into the Purchased Power Agreement (PPA) with the Municipal Electric Authority of Georgia (MEAG) for 206 MW of power and capacity from Plant Vogtle Units 3 and 4 ("Plant Vogtle").

Conditions in 2008

Growth Rate and Expected Need. In 2008, JEA's Average Annual Growth Rate (AAGR), for both peak and net energy, was approximately 2%. As a result, the projected peak in 2016 was 3,700 MW (winter) and 3,500 MW (summer), with net energy of approximately 17.5 million MWh. Additional energy and capacity was needed to accommodate this expected growth (Source: JEA 2008 Ten Year Site Plan)

Natural Gas Prices. Natural gas prices were high in 2008. As seen in the gold colored curve in Figure 1, natural gas prices at Henry Hub were over \$10/MMBTU and were expected to stay above \$8/MMBTU for the foreseeable future. (Source: Bloomberg)

Figure 1. Natural Gas (Henry Hub) Forward Curves, Selected Years 2006 – 2018. Source: Bloomberg



Carbon Dioxide Legislation. The first Regional Greenhouse Gas Initiatives started in 2005. By 2008, discussions about global

warming and greenhouse gases were accelerating, and in 2009 the Waxman-Markey bill (officially the *American Clean Energy and Security Act of 2009*) passed the House of Representatives. This bill, which was formulated and debated throughout 2008 called for a cap and trade system for carbon dioxide emissions, and implemented renewable standards. It never passed the Senate, and its failure led to the EPA's Clean Power Plan administrative (rather than legislative) approach to carbon regulation.

Nuclear Industry. In 2008, the nuclear industry was in "renaissance" mode. Several new designs had been developed and were being reviewed by the NRC, under a new permitting model (10CFR50.52). Under this model, the reactor design was submitted for approval by the vendor, and plant owners would submit Construction and Operating License Applications (COLA) to build and operate one of these approved designs on their site. The COLA would address site specific issues, while the vendor's Design Control Document (DCD) would address reactor design. Receiving a Construction and Operating License (COL) prior to construction was intended to remove the uncertainty around a separate Operating License application process at the completion of construction. The Westinghouse DCD for the AP1000 was submitted in 2002. The Vogtle contract was based on Rev. 15 of the DCD in 2008, and the Plant Vogtle COLA was submitted in March, 2008. The AP1000 was the most popular design of the nuclear renaissance, as it was selected as the technology for seven different sites (14 reactors). (Source: nrc.gov) In addition to NRC research and development support and licensing methodology changes, government support was provided to the project through Treasury Department Build America Bonds (BABs), Department of Energy Guaranteed Loans, and a Production Tax Credit covering the first eight years of generation.

Partners and Contractors. JEA has a long established history of partnership with Georgia utilities. Since the construction of the 500-kV transmission line linking Georgia and Florida, JEA has received anywhere from 10 to 60 percent of its annual energy requirements from Georgia, with a thirty-five year (1982-2017) average of 22 percent of annual energy requirements. The lead owner on Plant Vogtle, Georgia Power, is a subsidiary of Southern Company, one of the nation's largest utilities. Another Southern Company affiliate, Southern Nuclear, is an experienced operator, with six current nuclear plants in its fleet. In addition, Westinghouse, the vendor for the AP1000, was an over 100-year old company with deep roots in the nuclear industry, and was responsible for the design of over half of the current US nuclear plants. Stone & Webster, the other half of the design and construction consortium, was also over 100 years old and had built a large percentage of the current nuclear plants.

Attachment A - JEA and Plant Vogtle Units 3 and 4

The Decision

Based on all the factors detailed above, the JEA Board voted in May 2008 to set a goal of 10% of JEA's energy to be supplied by nuclear power by 2018. The Plant Vogtle PPA, approved later in 2008, met this goal. The commitment to Plant Vogtle was for a 20-year PPA for approximately 10 percent of the output of the plant.

Current Conditions/ Changes Since 2008

Growth Rate and Expected Need. In 2017, following the economic downturn of 2010-2012, JEA's AAGR, for both peak (winter) and net energy, was approximately 0.8%. As a result, the actual peak in 2016 was near 2,700 MW (winter) and 2,800 MW (summer), a 20-28 percent drop from the peaks forecasted in 2008. Actual net energy in 2016 was approximately 12.9 million MWh, 30 percent short of the 2008 projection of 17.5 million MWh. (Source: JEA 2017 Ten Year Site Plan)

Natural Gas Prices. Since 2008, natural gas prices have fallen dramatically, as a result of the implementation of shale gas recovery technologies. The green and orange curves on Figure 1 show the 2017 and 2018 natural gas price forward curves. Natural gas is now below \$3/MMBTU, and expected to stay there for the foreseeable future. (Source: Bloomberg)

Carbon Dioxide Legislation. Carbon legislation, while still discussed in some states, has been largely rejected at the national level. Low natural gas prices, however, have driven shifts from solid fuel to natural gas combined cycle power plants that have largely met or exceeded many of the goals of carbon dioxide legislation. Costs for wind and solar energy have dropped drastically, and adoption has further lowered the national carbon emissions. As a result, there are currently no projected carbon penalties in the US.

Nuclear Industry. The "renaissance" that began in the early 2000s has faltered. Where once there were 28 reactors in licensing or under construction, there are now only the two Plant Vogtle units under construction, and FPL's two Turkey Point units with applications under review. Other COLs have been granted and put on hold, suspended, withdrawn, or canceled. (Source: nrc.gov)

Partners and Contractors. The Westinghouse AP1000 DCD (Rev. 19) was approved by the NRC in December, 2011, over nine years after the first submittal, and the Vogtle COL was approved in February, 2012. TVA's Bellefonte plant, which was supposed to be the first AP1000 units, were canceled, leaving Plant Vogtle as the first, or "reference" plant for the AP1000. The innovative approaches to construction, i.e., the modular construction intended to speed the construction progress, resulted in QA issues as remote work sites were unable to meet the rigorous nuclear QA required. In addition, the new licensing approach meant that many field changes during construction needed to be processed in advance as license amendments. Through these challenges, delays and cost impacts, the Vogtle owners were protected by their contract with Stone & Webster and Westinghouse, which placed the responsibility for most of the overruns on the vendor. Over the past five years, Stone & Webster, which was owned by Shaw, was sold first to CB&I and then to Westinghouse. Westinghouse, then the sole prime contractor on the project, announced its financial difficulties in December, 2016, and filed for bankruptcy protection in March, 2017. The problems at Westinghouse threatened to drag down Toshiba, its parent company and one of the leading companies in Japan. Toshiba has since paid \$3.68 billion to the Vogtle project to satisfy the parent guarantee on the contract, and has sold Westinghouse to an investment company.

Summary

Work continues on Plant Vogtle, but without the benefit of the contract which made Westinghouse responsible for most cost overruns. As a result, any further cost overruns will be borne by the co-owners, and a fraction by JEA. As a result of the demise of carbon rules and the drop in natural gas prices, energy from Plant Vogtle is no longer projected to be economic when Units 3 and 4 are expected to be in service in November 2021 and November 2022, respectively. Future changes in carbon legislation, restrictions on shale gas production, or other factors could quickly change that assessment.



**ANNUAL DISCLOSURE REPORT
FOR
ELECTRIC UTILITY SYSTEM
FOR
FISCAL YEAR
ENDED
SEPTEMBER 30, 2017**

ELECTRIC UTILITY SYSTEM

ELECTRIC UTILITY FUNCTIONS

Electric System

Power Purchase Contracts

Overview

As a result of an earlier 2008 policy establishing a 10 percent of total energy from nuclear energy goal, JEA entered into a power purchase agreement (as amended, the “Additional Vogtle Units PPA”) with the Municipal Electric Authority of Georgia (“MEAG Power”) for 206 MW of capacity and related energy from MEAG Power’s interest in two additional nuclear generating units (the “Additional Vogtle Units” or “Plant Vogtle Units 3 and 4”) under construction at the Alvin W. Vogtle Nuclear Plant in Burke County, Georgia. The owners of the Additional Vogtle Units include Georgia Power Company (“Georgia Power”), Oglethorpe Power Corporation (“Oglethorpe”), MEAG Power and the City of Dalton, Georgia (collectively, the “Owners” or “Vogtle Co-Owners”). The energy received under the Additional Vogtle Units PPA is projected to represent approximately 13 percent of JEA’s total energy requirements in the year 2023.

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 and on the loans made and to be made by the Project J Entity referred to below, in each case, to finance the portion of the capacity to be sold to JEA from the Additional Vogtle Units) plus a margin over the term of the Additional Vogtle Units PPA. Under the Additional Vogtle Units PPA, JEA is entitled to 103 MW 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 such capacity and energy 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 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 either Additional Vogtle Unit is suspended or terminated.

Financing and In-Service Costs

MEAG Power created three separate “projects” (the “Vogtle Units 3 and 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). 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." MEAG Power currently estimates that the total in-service cost for its entire undivided ownership interest in the Additional Vogtle Units will be approximately \$5.7 billion, including construction costs, financing costs through the estimated in-service dates, contingencies, initial fuel load costs and switchyard and transmission costs. This cost reflects the payments from Toshiba Corporation ("Toshiba") of approximately \$835.4 million (of which approximately \$344 million is allocable to Project J) under the Guarantee Settlement Agreement discussed further in this section. MEAG Power has additionally provided that its total financing needs for its share of the Additional Vogtle Units, including reserve funds and other fund deposits required under the financing documents, are approximately \$6.1 billion. Based on information provided by MEAG Power, (i) the portion of the total in-service cost for Plant Vogtle Units 3 and 4 allocable to Project J is approximately \$2.394 billion, which is an increase of approximately \$548 million from the previous estimate, and (ii) the portion of additional in-service costs relating to reserve funds and other fund deposits is approximately \$187 million resulting in total financing needs of approximately \$2.581 billion, which is an increase in total financing needs for Plant Vogtle Units 3 and 4 allocable to Project J of approximately \$579 million from the previous estimate.

On February 9, 2018, MEAG Power announced that Congress passed and President Donald Trump signed budget legislation that will benefit the expansion of Plant Vogtle. MEAG Power noted that included in the budget agreement is a provision that suspends the deadline for receiving advanced nuclear production tax credits and a modification to allow public power utilities, such as MEAG Power, to utilize the credits which were intended to incentivize construction of new nuclear facilities in the U.S. MEAG Power reported that the passage of this bill is expected to provide benefits amounting to hundreds of millions of dollars for MEAG Power's ownership share of the project.

Financing for Project J – In order to finance a portion of its acquisition and construction of Project J and to refund bond anticipation notes previously issued by MEAG Power, MEAG Power issued approximately \$1.248 billion of its Plant Vogtle Units 3 and 4 Project J Bonds (the "2010 PPA Bonds") on March 11, 2010. Of the total 2010 PPA Bonds, approximately \$1.224 billion were issued as Federally Taxable – Issuer Subsidy – Build America Bonds where MEAG Power expects to receive a cash subsidy payment from the United States Treasury for 35 percent of the related interest, subject to reduction due to sequestration. At this time, a portion of the interest subsidy payments with respect to the Build America Bonds is not being paid as a result of the federal government sequestration process for the current fiscal year and reductions may continue in subsequent fiscal years. The exact amount of such reduction is determined on or about the beginning of the federal government's fiscal year, or October 1, and is subject to adjustment thereafter. The current reduction amount of 6.6 percent became effective on October 1, 2017. MEAG Power issued approximately \$185.2 million of additional Project J tax-exempt bonds on September 9, 2015.

On June 24, 2015, in order to obtain certain loan guarantees from the United States Department of Energy ("DOE") for further funding of Plant Vogtle Units 3 and 4, MEAG Power divided its undivided ownership interest in Plant Vogtle Units 3 and 4 into three separate undivided interests and transferred such interests to the Vogtle Units 3 and 4 Project Entities. 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 (the "Project J Entity").

The Project J Entity entered into a loan guarantee agreement with DOE in 2015, subsequently amended in 2016 and 2017, under which the Project J Entity is permitted to borrow from the Federal Financing Bank ("FFB") an aggregate amount of approximately \$577.7 million. To date, the Project J Entity

has received proceeds from borrowings under the loan guarantee agreement in an aggregate principal amount of approximately \$336.7 million. There is additional borrowing capacity of approximately \$241.0 million under the Project J Entity's existing DOE-guaranteed loan. On September 28, 2017, DOE and MEAG Power and the Vogtle Units 3 and 4 Project Entities entered into a conditional commitment for additional DOE loan guarantees in the aggregate amount of \$414.7 million, of which \$111.5 million is allocable to the Project J Entity. Subject to satisfaction of the conditions contained in such conditional commitment, it is expected that the Project J Entity will obtain from FFB such additional lending commitment in the amount of \$111.5 million. MEAG Power expects that the total financing needs for Project J will exceed the aggregate of the Project J Entity's FFB lending commitments and the balance will be financed in the public capital markets.

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Summary of financing associated with Project J*

	Borrowings to Date	Additional Capacity	Total Projected Borrowings
2010A Build America Bonds	\$1,224,265		\$1,224,265
2010B tax-exempt bonds	24,170		24,170
2015A tax-exempt bonds	185,180		185,180
DOE loan guarantee	336,674	\$241,069	577,743
Additional conditional DOE loan guarantee	-	111,541	111,541
Additional public markets bonds	-	390,713	390,713
Other sources of funds		67,355	67,355
Total	<u>\$1,770,289</u>	<u>\$810,678</u>	<u>\$2,580,967</u>

* MEAG anticipates funding the difference between the total in-service costs of approximately \$2.581 billion referred to under the paragraph "Financing and In-Service Costs" herein and the \$2,513,612 shown as Total Projected Borrowings above (excluding Other sources of funds) with interest earnings on unexpended borrowings.

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Based on information provided by MEAG Power, JEA's portion of the debt service to maturity on the outstanding Project J debt as of September 30, 2017 is summarized as follows:⁽¹⁾

Fiscal Year Ending September 30	Debt Service (000's omitted)						Net Debt Service
	Principal	Interest	Annual Debt Service	Build America Bonds Subsidy	Capitalized Interest		
2017	\$ 8,795	\$ 96,583	\$ 105,378	\$ (27,702)	\$ (68,882)	\$ 8,794	
2018	11,698	96,139	107,837	(27,696)	(68,443)	11,698	
2019	12,750	95,495	108,245	(27,612)	(67,883)	12,750	
2020	15,114	94,714	109,828	(27,392)	(67,321)	15,115	
2021	18,016	93,831	111,847	(27,100)	(66,731)	18,016	
2022	20,706	92,824	113,530	(26,790)	(31,897)	54,843	
2023	21,510	91,747	113,257	(26,466)	(4,109)	82,682	
2024	22,967	90,613	113,580	(26,129)	-	87,451	
2025	23,819	89,420	113,239	(25,776)	-	87,463	
2026	24,685	88,178	112,863	(25,409)	-	87,454	
2027	25,570	86,886	112,456	(25,026)	-	87,430	
2028	26,538	85,541	112,079	(24,626)	-	87,453	
2029	27,511	84,140	111,651	(24,209)	-	87,442	
2030	28,528	82,682	111,210	(23,774)	-	87,436	
2031	29,586	81,164	110,750	(23,320)	-	87,430	
2032	30,661	79,584	110,245	(22,847)	-	87,398	
2033	31,842	77,939	109,781	(22,353)	-	87,428	
2034	33,035	76,226	109,261	(21,838)	-	87,423	
2035	34,272	74,442	108,714	(21,300)	-	87,414	
2036	28,275	72,584	100,859	(20,740)	-	80,119	
2037	16,223	70,650	86,873	(20,155)	-	66,718	
2038	10,905	68,637	79,542	(19,545)	-	59,997	
2039	6,973	66,540	73,513	(18,909)	-	54,604	
2040	1,424	64,321	65,745	(18,246)	-	47,499	
2041	-	62,012	62,012	(17,553)	-	44,459	
2042	-	30,231	30,231	(9,217)	-	21,014	
2043	-	3,952	3,952	(1,249)	-	2,703	
Total	\$ 511,403	\$ 2,097,075	\$ 2,608,478	\$ (602,979)	\$ (375,266)	\$ 1,630,233	

⁽¹⁾ At this time, a portion of the interest subsidy payments with respect to the Build America Bonds is not being paid as a result of the federal government sequestration process for the current fiscal year and reductions may continue in subsequent fiscal years. The exact amount of such reduction is determined on or about the beginning of the federal government's fiscal year, or October 1, and is subject to adjustment thereafter. The current reduction amount of 6.6 percent became effective on October 1, 2017.

Description of Construction Contracts

In 2008, Georgia Power, acting for itself and as agent for the other Vogtle Co-Owners, entered into a contract (the "EPC Contract") pursuant to which the Contractor agreed to design, engineer, procure, construct and test the Additional Vogtle Units. The entities that constituted the Contractor prior to June 9, 2017 were Westinghouse Electric Company LLC ("Westinghouse") and WECTEC Global Project Services Inc. ("WECTEC," and together with Westinghouse, the "Contractor").

On March 29, 2017, Westinghouse and WECTEC each filed for bankruptcy protection under Chapter 11 of the United States Bankruptcy Code.

On June 9, 2017, Georgia Power (for itself and as agent for the other Vogtle Co-Owners) and the Contractor entered into a services agreement (the "Services Agreement") for the Contractor to transition construction management of Plant Vogtle Units 3 and 4 to Southern Nuclear Operating Company, an affiliate of Georgia Power ("SNC" or "Southern Nuclear"), and to provide ongoing design, engineering, and procurement services to SNC. The Services Agreement has taken effect and provides that the Contractor will generally be compensated on a time and materials basis for services rendered. The Services Agreement will continue until the start-up and testing of Plant Vogtle Units 3 and 4 is complete and electricity is generated and sold from both units. The Services Agreement is terminable by the Vogtle Co-Owners upon 30 days' written notice.

Georgia Power recommended in the 17th Vogtle Construction Monitoring report (the "VCM 17 Report," filed with the Georgia Public Service Commission ("GPSC") on August 31, 2017 that the construction of the Additional Vogtle Units be continued. The recommendation to continue construction was supported by all of the Vogtle Co-Owners. Georgia Power has requested GPSC approval for a new project management structure in light of the realities that now exist after the Westinghouse and WECTEC bankruptcies. Under the new project management structure, Georgia Power, along with SNC acting as the project manager, will manage the construction of the Additional Vogtle Units on behalf of the Owners pursuant to a revised Ownership Participation Agreement. Bechtel Power Corporation ("Bechtel") will serve as the prime construction contractor (see the description of the Construction Agreement below).

Going forward, Georgia Power through its agent SNC will manage the remaining bulk construction phase of the Additional Vogtle Units.

On October 19, 2017, Georgia Power, acting for itself and as agent for the other Vogtle Co-Owners, entered into a Construction Completion Agreement (the "Construction Agreement") with Bechtel, which became effective on October 23, 2017. Under the Construction Agreement, Bechtel will serve as the primary contractor for the remaining construction activities for Plant Vogtle Units 3 and 4. Facility design and engineering remains the responsibility of Westinghouse under the Services Agreement.

Unlike the EPC Contract, which required the contractor to absorb most of the construction cost overruns for the Additional Vogtle Units, the Construction Agreement is a cost reimbursable plus fee arrangement, whereby Bechtel will be reimbursed by the Vogtle Co-Owners for actual costs plus a base fee and an at-risk fee, which is subject to adjustment based on Bechtel's performance against cost and schedule targets. Each Vogtle Co-Owner is severally (not jointly) liable for its proportionate share, based on its ownership interest, of all amounts owed to Bechtel under the Construction Agreement.

The Vogtle Co-Owners may terminate the Construction Agreement at any time for their convenience; provided that the Vogtle Co-Owners will be required to pay amounts related to work performed prior to the termination (including the applicable portion of the base fee), certain termination-related costs and, at certain stages of the work, the at-risk fee. Bechtel may terminate the Construction Agreement under certain circumstances, including, certain Vogtle Co-Owner suspensions of work, certain breaches of the Construction Agreement by the Vogtle Co-Owners, Vogtle Co-Owner insolvency and certain other events.

In addition, pursuant to the separate Loan Guarantee Agreements (each, a "DOE Loan Guarantee Agreement"), dated as of June 24, 2015, between each of the Vogtle Units 3 and 4 Project Entities and DOE, as amended, each Vogtle Units 3 and 4 Project Entity is required to obtain approval of the

Construction Agreement by the DOE prior to any further advances under its respective DOE Loan Guarantee Agreement.

In connection with the recommendation to continue with construction of Plant Vogtle Units 3 and 4, the Vogtle Co-Owners agreed on a term sheet to amend the existing joint ownership agreements to provide for additional Vogtle Co-Owner approval requirements. Subsequently, the Vogtle Co-Owners entered into an amendment, dated as of November 2, 2017, to their joint ownership agreements for Plant Vogtle Units 3 and 4 (as amended, the "Joint Ownership Agreements") to provide for, among other conditions, additional Vogtle Co-Owner approval requirements. Pursuant to the Joint Ownership Agreements, the holders of at least 90 percent of the ownership interests in Plant Vogtle Units 3 and 4 must vote to continue construction if certain adverse events occur, including: (1) the bankruptcy of Toshiba or (except in the case in which each of the Vogtle Co-Owners has assigned its rights under the Guarantee Settlement Agreement to a third party) a material breach by Toshiba of the Guarantee Settlement Agreement; (2) termination or rejection in bankruptcy of certain agreements, including the Services Agreement or the Construction Agreement; (3) the GPSC or Georgia Power determines that any of Georgia Power's costs relating to the construction of Plant Vogtle Units 3 and 4 will not be recovered in retail rates because such costs are deemed unreasonable or imprudent; or (4) an increase in the construction budget contained in the VCM 17 Report of more than \$1 billion or extension of the project schedule contained in the VCM 17 Report of more than one year. In addition, pursuant to the Joint Ownership Agreements, the required approval of holders of ownership interests in Plant Vogtle Units 3 and 4 is at least (1) 90 percent for a change of the primary construction contractor and (2) 67 percent for material amendments to the Services Agreement or agreements with Southern Nuclear or the primary construction contractor, including the Construction Agreement.

The effectiveness of the amendment to the Joint Ownership Agreements is subject to the condition that Oglethorpe obtains the approval of the Administrator of the Rural Utilities Service.

The Joint Ownership Agreements also confirm that the Vogtle Co-Owners' sole recourse against Georgia Power or Southern Nuclear for any action or inaction in connection with their performance as agent for the Vogtle Co-Owners is limited to removal of Georgia Power and/or Southern Nuclear as agent, except in cases of willful misconduct.

MEAG Power, based upon information provided to it by its agent, Georgia Power, has advised JEA that the current estimated in-service dates for the Additional Vogtle Units are November 2021 and November 2022.

Regulatory Proceedings

The Vogtle Co-Owners recommended that the Additional Vogtle Units be completed on the condition that any of the Owners have the right to abandon the construction of the Plant Vogtle Units 3 and 4 if the revised cost estimate or the revised construction schedule is not approved by the GPSC, or if there is a determination by the GPSC that any of Georgia Power's share of the total investment in Plant Vogtle Units 3 and 4 or Georgia Power's associated financing costs will not be recovered in Georgia Power's retail rates because they are deemed by the GPSC to be unreasonable or imprudent or for any other reason, or that such investment or associated financing costs will be presumed to be unreasonable or imprudent or unrecoverable.

On December 21, 2017, the Georgia Public Service Commission approved Georgia Power Company's recommendation to complete construction of Plant Vogtle Units 3 and 4, which are expected to be online in November 2021 (Unit 3) and November 2022 (Unit 4).

JEA has been granted intervener status in GPSC proceedings regarding the Additional Vogtle Units.

Should the GPSC render a decision at a later date that either directly or indirectly results in a cancellation of the Additional Vogtle Units, JEA believes such a cancellation will reduce both JEA's risks and its overall costs when compared with completion of the Additional Vogtle Units. Accordingly, JEA has previously informed MEAG Power that it disagrees with the recommendation to complete the Additional Vogtle Units and that it believes that the project should be cancelled rather than completed. Based on a comprehensive analysis, JEA believes that cancellation of the Additional Vogtle Units will reduce its risks by eliminating cost and schedule uncertainty regarding the completion of the Additional Vogtle Units. JEA also believes that, if the project is cancelled, the projected cost of replacement power plus the cost of JEA's continuing obligation to pay Project J debt service under the terms of the Additional Vogtle Units PPA will be less than the cost of purchasing power under the Additional Vogtle Units PPA over the 20-year term of the Additional Vogtle Units PPA if the project is completed. JEA continues to plan as if the project will be completed in accordance with the most recent cost estimate and construction schedule provided by MEAG Power.

Description of Toshiba Guarantee

Toshiba guaranteed certain payment obligations of Westinghouse and WECTEC under the EPC Contract, including any liability of Westinghouse and WECTEC for abandonment of work (the "Toshiba Guarantee").

On June 9, 2017, Georgia Power and the other Vogtle Co-Owners and Toshiba entered into a settlement agreement regarding the Toshiba Guarantee (the "Guarantee Settlement Agreement"). Pursuant to the Guarantee Settlement Agreement, Toshiba acknowledged the amount of its obligation under the Toshiba Guarantee is \$3.68 billion (the "Guarantee Obligations") and that the Guarantee Obligations exist regardless of whether the Additional Vogtle Units are completed.

By December 14, 2017, Toshiba had made payments totaling its entire \$3.68 billion of Guarantee Obligations under the Guarantee Settlement Agreement to Georgia Power Company, for the benefit of Georgia Power Company and the other Vogtle Co-Owners. The portion of the payments allocable to Project J is approximately \$344 million.



JEA Annual Revenue and Expense Projection

Telecom Infrastructure & Facilities (Fiber, Wireless Colocation, Pole Attachments)

April 3, 2018

NOTE: This revenue projection assumes status quo for Dark Fiber line of business; resolution to expand offering not approved.

Annual Revenue Forecast	2017	2018	2019	2020	2021	2022
Total Telecom Facilities Revenues	\$ 8,616,024	\$ 8,790,934	\$ 9,502,470	\$ 10,082,258	\$ 10,447,534	\$ 10,834,353
Pole Attachment Revenues _{1,2}	\$ 4,830,156	\$ 4,819,820	\$ 5,079,915	\$ 5,347,812	\$ 5,508,246	\$ 5,673,494
Wireless Colocation Leasing Revenues ₃	\$ 1,922,505	\$ 1,996,213	\$ 2,302,533	\$ 2,408,306	\$ 2,568,710	\$ 2,733,930
Dark Fiber Leasing Revenues ₄	\$ 1,863,363	\$ 1,974,901	\$ 2,120,023	\$ 2,326,139	\$ 2,370,578	\$ 2,426,929

Expenses	2017	2018	2019	2020	2021	2022
Total Telecom Facilities Operating Expenses	\$ 1,037,407	\$ 1,051,735	\$ 1,066,369	\$ 1,081,315	\$ 1,096,579	\$ 1,112,167
Operations:						
Salaries, OT, and Benefits ₅	\$ 605,270	\$ 617,376	\$ 629,723	\$ 642,318	\$ 655,164	\$ 668,267
Depreciation ₆	\$ 279,137	\$ 278,300	\$ 277,465	\$ 276,632	\$ 275,803	\$ 274,975
Maintenance Agreements ₇	\$ 153,000	\$ 156,060	\$ 159,181	\$ 162,365	\$ 165,612	\$ 168,924
Capital Construction Costs ₈	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Notes and Assumptions - Telecom Facilities Infrastructure

- 1: Pole attachment revenue increases due to standard agreement with 3% escalator and new attachers; standard agreement in place across 10 attaching entities.
- 2: JEA Pole attachment rent rates calculated via APPA cost-based formula.
- 3: Wireless colocation revenues include both annual rents and construction & maintenance revenues for macro-site towers and small cells.
- 4: This revenue projection assumes status quo for Dark Fiber line of business; no approval of resolution to expand dark fiber business offering.
- 5: O&M: 2% annual growth of Allocated Salaries, OT, and Benefits is based on cost center B0011 Management and cost center 30904 Management (35%) & Dedicated staff (100%)
- 6: Depreciation: From Project Accounting's Power Plan assets labeled Fiber Optics. Actuals are allocated based on approx. Strand Miles assumed available for lease (38.7%)
- 7: Maintenance agreements and inspection expenses for tower and site maintenance.
- 8: There are no capital costs for pole attachment, wireless colocation, or Dark Fiber business offering (status quo). If approved to expand, Dark Fiber would incur capital costs.

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JEA Annual Revenue and Expense Projection
 Dark Fiber Utility Services (Current State Program Offering)
 April 3, 2018



NOTE: This revenue projection assumes status quo for Dark Fiber line of business; resolution to expand offering not approved.

Annual Revenue Forecast	2017	2018	2019	2020	2021	2022
Dark Fiber Leasing Revenues ₁	\$ 1,863,363	\$ 1,974,901	\$ 2,120,023	\$ 2,326,139	\$ 2,370,578	\$ 2,426,929

Expenses	2017	2018	2019	2020	2021	2022
Total Dark Fiber Operating Expenses	\$ 761,272	\$ 770,077	\$ 779,078	\$ 788,278	\$ 797,681	\$ 807,291
O&M ₂	\$ 482,135	\$ 491,778	\$ 501,613	\$ 511,646	\$ 521,878	\$ 532,316
Depreciation ₃	\$ 279,137	\$ 278,300	\$ 277,465	\$ 276,632	\$ 275,803	\$ 274,975
Projected Capital Expenses ₄	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

All current capital expenses are part of Fiber R&R budget for utility services only.

Future capital expenses will be customer project-driven, ensuring financial viability and rate of return targets.

Notes and Assumptions - Dark Fiber

- 1: Dark Fiber revenue growth based on current book of business; 3% escalator on Verizon ring; acquisition of westside ring mid-2019 due to joint-use expiration.
- 2: O&M: 2% annual growth of Allocated Salaries, OT, and Benefits is based on cost center B0011 - Management(50%) and 30904 Management (35%) & Dedicated staff (100%)
- 3: Depreciation: From Project Accounting's Power Plan assets labeled Fiber Optics. Actuals are allocated based on approx. Strand Miles assumed available for lease (38.7%)
- 4: Without approval of JEA Board Resolution #2018-01 by Jacksonville City Council, JEA is not authorized to spend capital funds on Dark Fiber line of business.

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JEA Annual Revenue and Expense Projection

Dark Fiber Utility Services (Expanded Program Offering)

April 3, 2018



NOTE: This revenue projection assumes expansion of Dark Fiber line of business; resolution to expand offering is approved at Council.

Annual Revenue Forecast	2017	2018	2019	2020	2021	2022
Dark Fiber Leasing Revenues ₁	\$ 1,863,363	\$ 1,974,901	\$ 2,516,381	\$ 3,369,714	\$ 4,043,992	\$ 4,115,864
Expenses	2017	2018	2019	2020	2021	2022
Total Dark Fiber Operating Expenses	\$ 761,272	\$ 870,077	\$ 1,129,078	\$ 1,088,278	\$ 1,147,681	\$ 1,107,291
O&M ₂	\$ 482,135	\$ 491,778	\$ 501,613	\$ 511,646	\$ 521,878	\$ 532,316
Depreciation ₃	\$ 279,137	\$ 278,300	\$ 277,465	\$ 276,632	\$ 275,803	\$ 274,975
Projected Capital Expenses	\$ -	\$ 100,000	\$ 350,000	\$ 300,000	\$ 350,000	\$ 300,000

Future capital expenses will be customer project-driven, ensuring financial viability and rate of return targets.

Notes and Assumptions - Dark Fiber

- 1: Dark Fiber revenues increase based upon rate escalation in contracts, new contract opportunities, and expiration of joint-use agreements leading to new revenue.
- 2: O&M: 2% annual growth of Allocated Salaries, OT, and Benefits is based on cost center B0011 - Management(50%) and 30904 Management (35%) & Dedicated staff (100%)
- 3: Depreciation: From Project Accounting's Power Plan assets labeled Fiber Optics. Actuals are allocated based on approx. Strand Miles assumed available for lease (38.7%)

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JEA Annual Revenue and Expense Projection
 Wireless Colocation Utility Services (Including Small Cell Facilities)
 April 3, 2018

Annual Revenue Forecast	2017	2018	2019	2020	2021	2022
Wireless Colocation Leasing Revenues ₁	\$ 1,922,505	\$ 1,996,213	\$ 2,302,533	\$ 2,408,306	\$ 2,568,710	\$ 2,733,930

Future Sensitivities:

JEA may consider changing the escalator in tower rent structures (currently @ 4% annually).
 Our rent prices continue to increase in a relatively competitive environment.

Expenses	2017	2018	2019	2020	2021	2022
Total Wireless Colocation Operating Expenses	\$ 214,568	\$ 218,859	\$ 223,236	\$ 227,701	\$ 232,255	\$ 236,900
Operations:						
Salaries, OT, and Benefits ₂	\$ 61,568	\$ 62,799	\$ 64,055	\$ 65,336	\$ 66,643	\$ 67,976
Maintenance Agreements ₃	\$ 153,000	\$ 156,060	\$ 159,181	\$ 162,365	\$ 165,612	\$ 168,924
Capital Construction Costs ₄	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Notes and Assumptions - Wireless Colocation

- 1: Wireless Colocation revenues include macro-site (tower) rent and maintenance revenues, small cell rent and construction revenues, and site application fees.
- 2: O&M: 2% annual growth of Allocated Salaries, OT, and Benefits is based on cost center B0011 - Management(50%)
- 3: Maintenance agreements and inspections for tower and site maintenance.
- 4: Wireless colocation line of business does not incur capital costs; lessees pay all costs of construction.

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JEA Annual Revenue and Expense Projection

Utility Pole Attachment Facilities

April 3, 2018



Annual Revenue Forecast	2017	2018	2019	2020	2021	2022
Utility Pole Attachment Revenues ^{1,2}	\$ 4,830,156	\$ 4,819,820	\$ 5,079,915	\$ 5,347,812	\$ 5,508,246	\$ 5,673,494

Expenses	2017	2018	2019	2020	2021	2022
Total Pole Attachment Operating Expenses	\$ 61,568	\$ 62,799	\$ 64,055	\$ 65,336	\$ 66,643	\$ 67,976
Operations:						
Salaries, OT, and Benefits ³	\$ 61,568	\$ 62,799	\$ 64,055	\$ 65,336	\$ 66,643	\$ 67,976
Capital Construction Costs ⁴	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Notes and Assumptions - Utility Pole Attachments

- 1: Pole attachment revenue increases due to standard agreement with 3% escalator and new attachers; standard agreement in place across 10 attaching entities.
- 2: JEA Pole attachment rent rates calculated via APPA cost-based formula.
- 3: O&M: 2% annual growth of Allocated Salaries, OT, and Benefits is based on cost center B0011 - Management(50%)
- 4: Pole attachment line of business does not incur capital costs.

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JEA Timber

	Revenues	Reforestation Expenses
FY15	\$4,610,667.16	
FY16	\$2,089,653.35	\$584,630.00
FY17		\$1,030,076.38
FY18	\$733,408.65	
FY19		\$120,000.00
Total	\$7,433,729.16	\$1,734,706.38

JEA does not expect any timber revenue beyond 2018 for at least 10 years.

JEA Natural Gas

	Revenues
FY18	\$105,375
FY19	\$173,737
FY20	\$217,143
FY21	\$228,043
FY22	\$272,237
Total	\$996,535

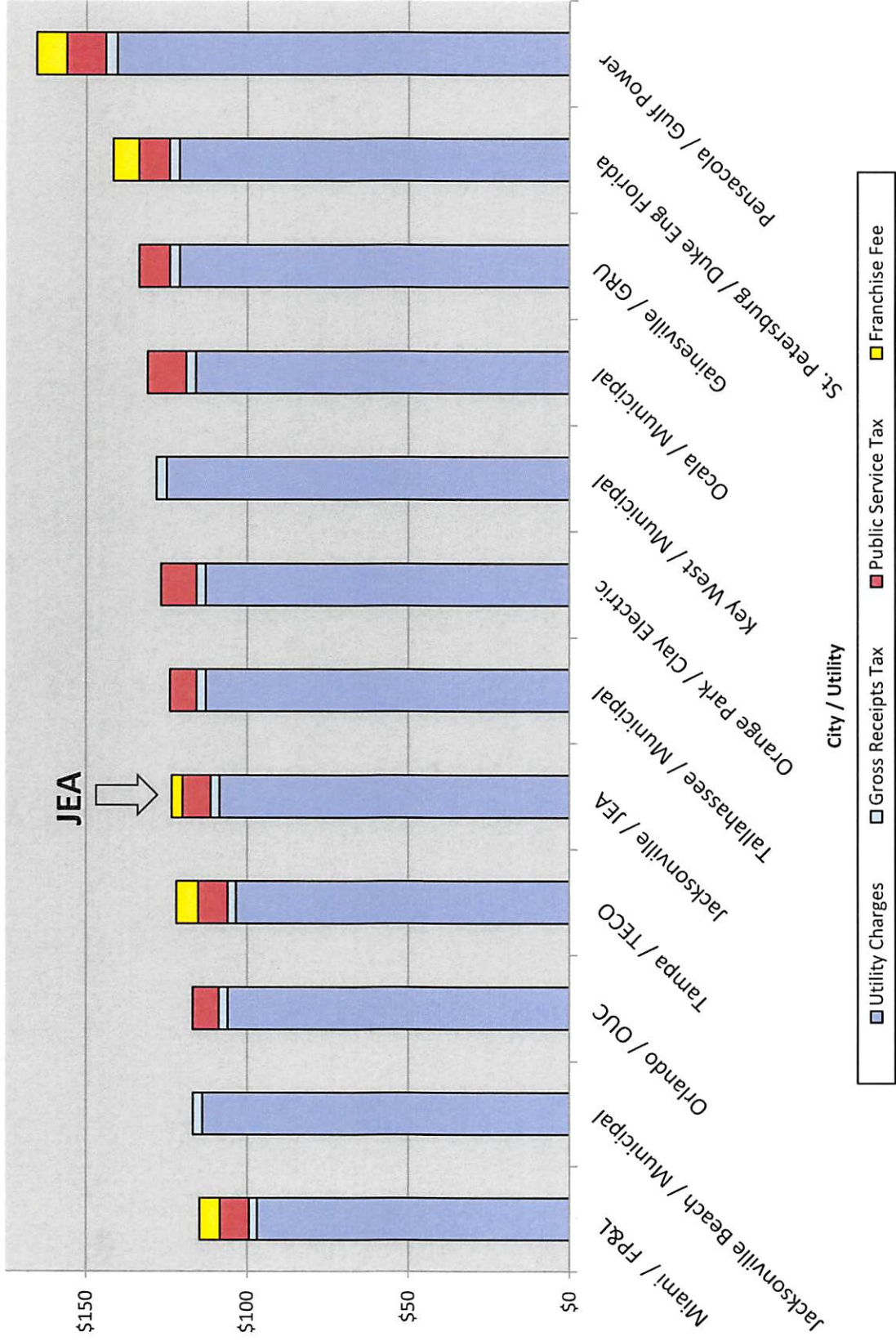
JEA - GRU Coordinated Dispatch

Latest Study Dated 3.2018		
Term:	FY 2019	October 2018 - September 2019
Assumptions:	Assumes 120 MW of transmission available at all times. No restrictions on flow between the utilities. GRU purchased GREC	
<hr/>		
JEA Net Benefit:	\$ 2,746,416	
Flow JEA - GRU:	318	GWh
Flow GRU - JEA:	149	GWh
Budget Study Dated 8.2017		
Term:	Calendar Year 2018	
Assumptions:	Restriction of flows between utility based on historical behavior. 80 MW of transmission JEA to GRU Peak, 120 MW Off Peak 50 MW of transmission GRU to JEA Peak, 0 MW Off Peak GREC is a PPA for GRU	
<hr/>		
JEA Net Benefit:	\$ 2,064,958	
Flow JEA - GRU:	195	GWh
Flow GRU - JEA:	66	GWh
Current Year to Date Activity Annualized		
Term:	October 2017 - October 2018 - September 2019	
Current Net Benefit:	\$ 5,582	
Annualized for FY2018:	\$ 11,164.36	

Florida Utilities Monthly Residential Electric Bill Comparison

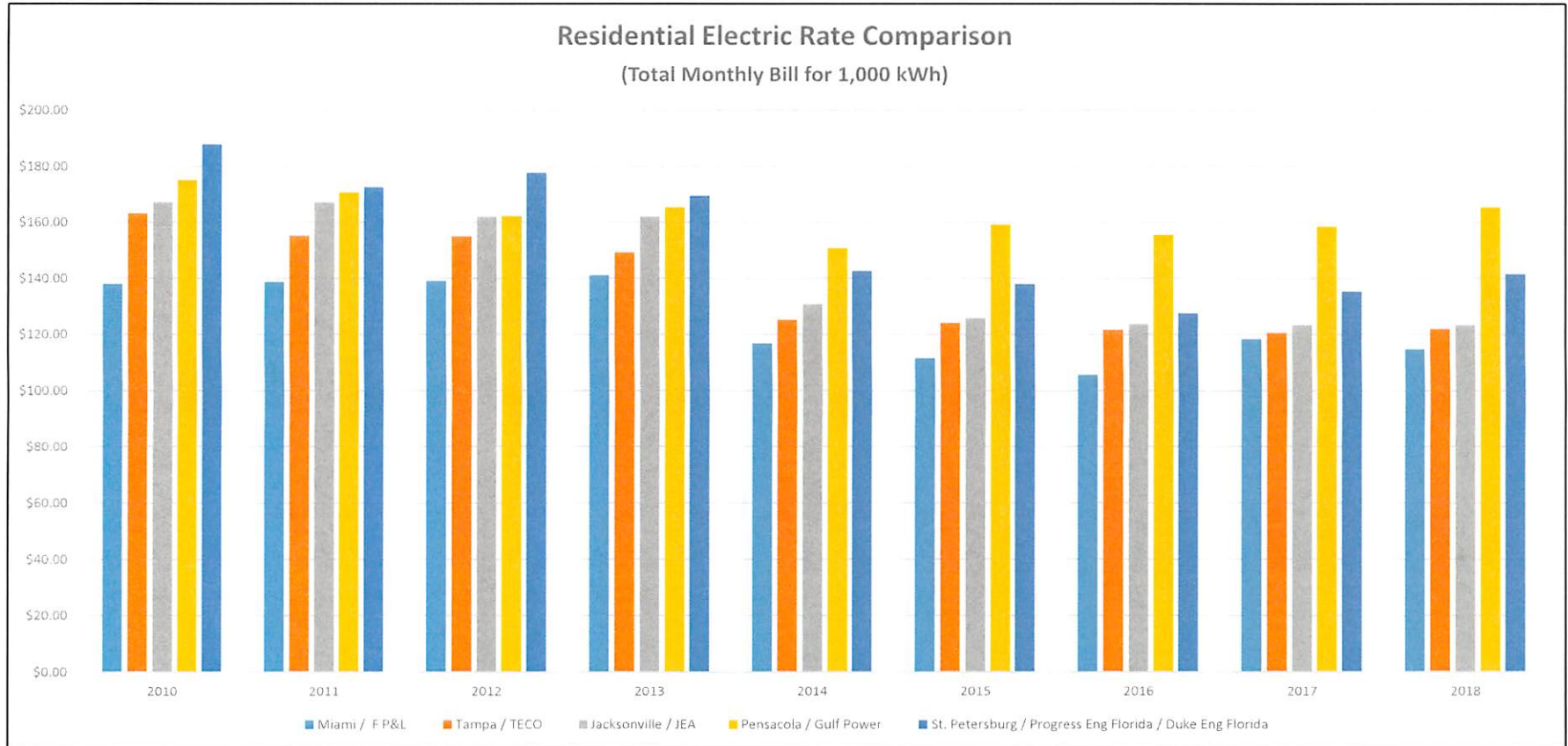
(Consumption @ 1,000 kWh)

Residential Rates as of April 2018



*FPL bill includes \$1.38/MWh storm charge and Duke bill includes a \$2.54/MWh storm charge in this comparison. The other utilities in this comparison do not currently assess storm charge in their bills. (1MWh=1000kWh)

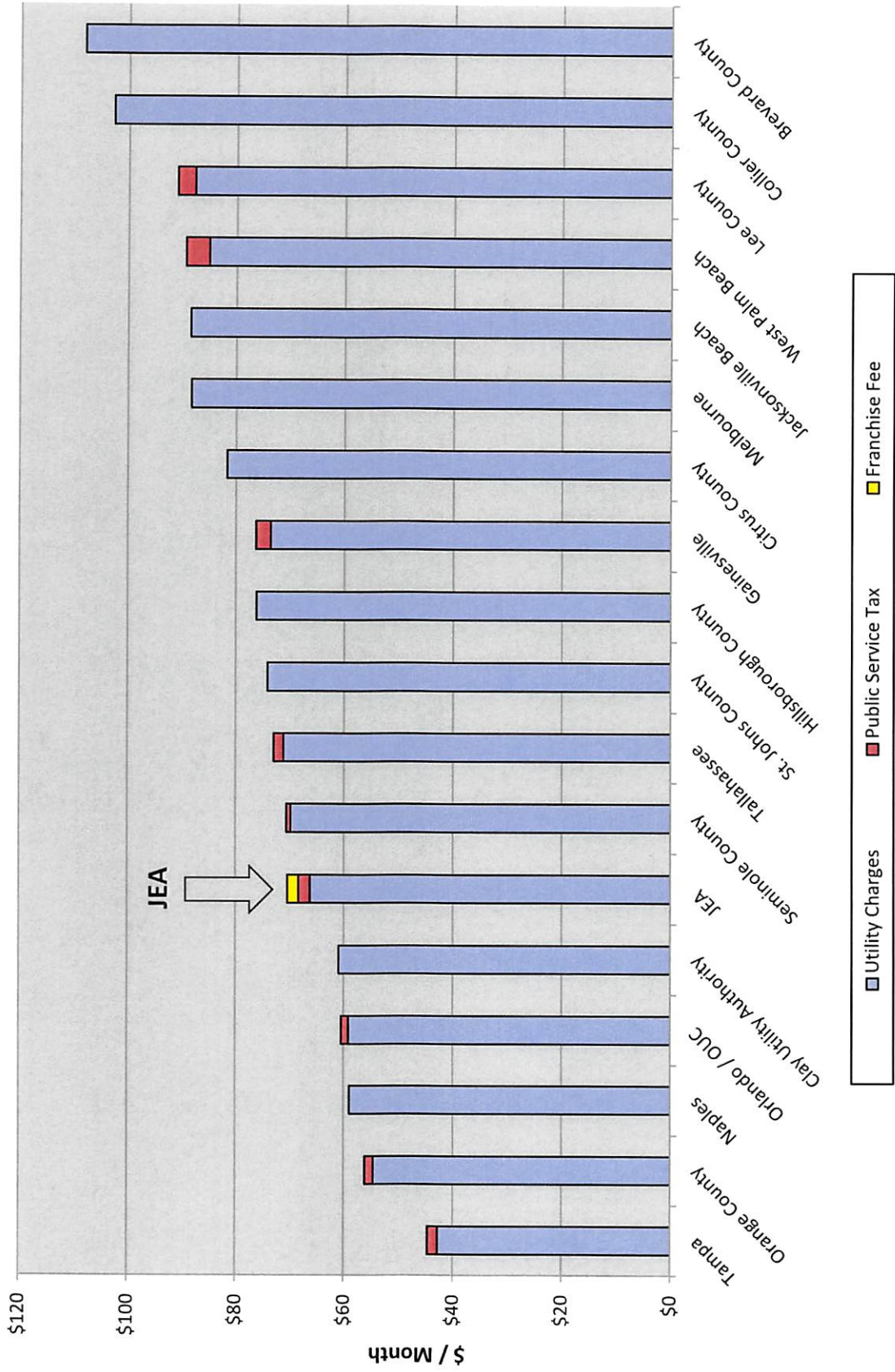
	2010	2011	2012	2013	2014	2015	2016	2017	2018	'10 - '18 Variance
Miami / F P&L	\$138.12	\$138.85	\$139.29	\$141.20	\$116.85	\$111.70	\$105.72	\$118.34	\$114.77	-17%
Tampa / TECO	\$163.23	\$155.23	\$155.11	\$149.39	\$125.41	\$124.13	\$121.68	\$120.60	\$121.98	-25%
Jacksonville / JEA	\$167.16	\$167.16	\$162.03	\$162.03	\$130.90	\$125.91	\$123.63	\$123.34	\$123.34	-26%
Pensacola / Gulf Power	\$175.20	\$170.85	\$162.30	\$165.44	\$150.93	\$159.30	\$155.65	\$158.56	\$165.37	-6%
St. Petersburg / Progress Eng Florida / Duke Eng Florida	\$187.80	\$172.63	\$177.76	\$169.60	\$142.74	\$138.16	\$127.71	\$135.38	\$141.65	-25%



Includes all charges, taxes and fees, including storm charges as applicable

Water & Sewer Rates in Florida

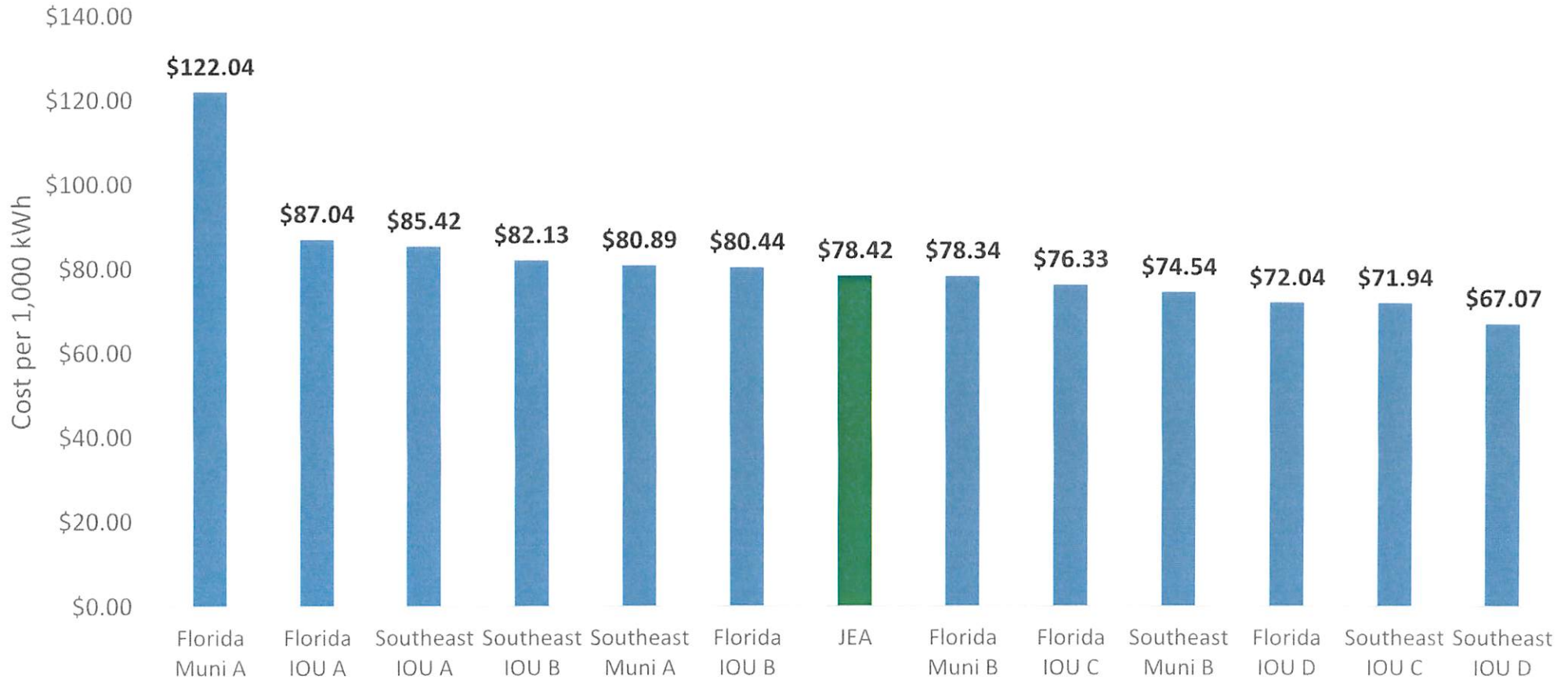
Residential Service with a 5/8" meter and 6 kgal of Consumption
Residential Rates as of April 2018



Electric Industrial Rate Comparison of Southeastern Utilities

GSLD primary service (73% load factor)

1,500 kW; 800,000 kWh - January 2018



- To maintain the integrity of the survey, the respondents are identified with general descriptions instead of specific names
- Amounts shown **exclude** location-specific charges such as gross receipts tax, public service tax, state sales tax, and franchise fees as these vary by state and are not assessed uniformly to customers across utilities' own service territories. These amounts can greatly impact the monthly costs.
- JEA offers two economic development programs to attract new business to Jacksonville, the Economic Development Program and the Economic Stimulus Rider
 - Currently the following are taking advantage of the EDP: Sysco International Food Group Inc., Dresser Equipment Group Inc., Hans Mill Corporation and IKEA
 - Jinko Solar plans to take advantage of the EDP once operational

RIDER EDP
 ECONOMIC DEVELOPMENT PROGRAM RIDER

(Experimental)

Available To new and existing customers receiving service in all territory served by JEA. Application for service under this Rider will not be accepted after September 30, 2018.

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

Character of Service JEA's standard voltage levels.

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

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

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

(Continued to Sheet No. 17.1)

(Continued from Sheet No. 17.0)

**Definition of
Incremental
Metered Demand**

The portion of the customer's metered demand which has increased by a minimum of 300 kW as a result of expansion or new construction.

**Definition of
Baseline**

JEA will establish a baseline usage for each qualifying existing customer. Such base usage will reflect the billed peak kW and highest kWh consumption for the 12 month period immediately preceding the Customer's application for service.

**General
Provisions**

- a) Customers must submit to JEA an application for service under this Rider. JEA must approve such application before the Customer may execute a Service Agreement and start service hereunder.
- b) The application must include the estimated amount of increased metered demand, nature of the increase and estimated timing of when the new metered demand will start. The application must also specify the total number of full time employees employed in JEA's service territory by the Customer at the time of the application for this Rider.
- c) The Customer must notify JEA in writing when either the planned increase in metered demand has been met or, at the option of the Customer, when the minimum 300 kW increase has been met. JEA may monitor the Customers metered demand for up to the next three months following the receipt of the Customer notification to confirm the baseline usage is exceeded by at least 300 kW.
- d) Additionally, the Customer must provide evidence annually that the number of full time employees in JEA's service territory reported at the time of application has increased by at least 15 and continues at such level.
- e) When both the new metered demand and the additional employee requirements have been met, the Customer must execute an Economic Development Program Rider Service Agreement.
- f) Year 1 discount will apply to the next twelve full billing cycles following execution of the Economic Development Program Rider Service Agreement.
- g) Customers adding more than 5,000 kW of new metered demand may elect to extend Year 1 discount for an additional 24 months to accommodate site construction.
- h) Customer adding service in areas designated for Load Density Improvement (as may be changed from time to time) will receive the discounts according to the schedule shown above.

(Continued to Sheet No. 17.2)

(Continued from Sheet No. 17.1)

Term of
Service

- a) Service under this rider shall be for at least six (6) years but not more than eight (8) years for projects greater than 5,000 kW, from the commencement of service and will terminate at the end of the final year.
- b) JEA may terminate service under this Rider if the Customer fails to maintain the full-time employees and/or the Customer fails to take the required amount of metered demand specified in the Economic Development Program Rider Service Agreement. If JEA elects to terminate the Economic Development Program Rider Service Agreement for noncompliance with Rider EDP, the Customer is no longer entitled to discounts provided by Rider EDP.
- c) Customers desiring to terminate service under this rider will be required to give JEA thirty (30) days written notice. If the Customer elects to terminate the Economic Development Program Rider Service Agreement the Customer is no longer entitled to discounts provided by Rider EDP.

Terms and
Conditions

- a) Service hereunder shall be subject to the Rules and Regulations of JEA.
- b) Service under this Rider shall not be available where the service is provided solely or predominately for:
 - 1) Multi-tenant residential or commercial properties
 - 2) Any service deemed "Temporary"
- c) A name change or other superficial change at an existing location, where the ownership and/or control over the premise is not changed, will not be considered as a new Customer.
- d) If a change of ownership of the same business occurs after the Customer has initiated an Economic Development Program Rider Service Agreement, the successor Customer may be allowed to continue the balance of the agreement provided there are no reductions in employment or metered demand.
- e) This Rider is not available for load shifted between service delivery points within JEA's service territory.
- f) This Rider is not available for renewal or extension beyond the date listed in the Economic Development Program Rider Service Agreement.
- g) Election of this Rider will preclude the election of any other JEA Rider, with the exception of JEA SolarSmart or SolarMax Riders, for new metered demand.
- h) Customer must maintain their JEA account in a current status. JEA retains the right to terminate this Rider at any time if Customer is classified as a "High Risk Customer" as defined in JEA Procedure MBC 302 Credit & Collections

Revenue Codes ES

RIDER ES
ECONOMIC STIMULUS RIDER

(Experimental)

AVAILABLE:

Service is available throughout the service territory served by JEA until such time as JEA may terminate this Economic Stimulus program. This Rider is available to qualifying commercial or industrial customers for service under the applicable JEA Rate Schedule GSLD. Customers desiring to take electric service under this Rider must make a written application for service. Customers requesting service under this Rider must execute a Service Agreement before September 30, 2021.

APPLICABLE:

Electric service provided under this optional Rider shall be applicable to projected electric service requirements which JEA has determined that:

- 1) Customer would not be served by JEA but for this Rider; and
- 2) Customer qualifies for such service under the terms and conditions set forth within this Rider.
- 3) Customer would seek service in jurisdiction outside of the State of Florida

Applicable Load shall be recognized:

New Load not previously served by JEA. Applicable Load must be served at a single site and must exceed a minimum level of demand as determined from the following provisions:

New Load: 1,000 kW or more of new Metered Demand.

Any customer receiving service under this Rider must provide the following documentation, the sufficiency of which shall be determined by JEA:

1. Legal attestation by the customer (through an affidavit signed by an authorized representative of the customer) attesting to the requirement of this Rider that without the use of this Economic Stimulus Rider the New Load would not be served by JEA; and
2. Documentation demonstrating to JEA's satisfaction that there is a viable lower cost alternative to serve the customer electric service needs.

Each customer shall enter into a Service Agreement with JEA to purchase the customer's entire requirements for electric service at the service location set forth in the Service Agreement.

(Continued to Sheet No. 18.1)

(Continued from Sheet No. 18.0)

CHARACTER OF SERVICE:

This experimental Rider is offered in conjunction with the rates, terms and conditions of the JEA Rate Schedule GSLD.

LIMITATION OF SERVICE:

Standby and sale for resale are not permitted under this Rider.

RATE PER MONTH:

Unless specifically noted in this Rider or within the Service Agreement, the charges assessed for electric service shall be those found within the otherwise applicable JEA Rate Schedule GSLD.

ADDITIONAL BASIC MONTHLY CHARGE:

\$250.00 per month

DEMAND/ENERGY/ENVIRONMENTAL CHARGES:

The charges under this Rider may include the Demand and/or Energy and/or Environmental Charges as set forth in the otherwise applicable Rate Schedule GSLD. The specific charges or procedure for calculating the charges under this Rider shall be set forth in a negotiated Service Agreement and shall at a minimum recover all incremental costs JEA incurs in serving the customer and contribute to JEA's fixed costs.

TERMS AND CONDITIONS:

- 1) Negotiated charges are to be determined by the consistent application of the following factors:
(a) customers' load characteristics; (b) alternative power supply; (c) customer credit quality;
(d) economic impact; (e) length of term of the Service Agreement; and (f) JEA's excess electric system capacity.
- 2) Negotiated terms and conditions associated with the Monthly Charges shall be set forth in the Service Agreement and may be applied during all or a portion of the term of the Service Agreement.
- 3) Service hereunder shall be subject to the Rules and Regulations of JEA.

JEA Volunteer and Ambassador Hours

	Volunteer Hours	Ambassador Hours	Volunteer and Ambassador Hours	Value of Volunteer Hours
FY 2015	4,096	1,139	5,235	\$104,746
FY 2016	4,929	3,320	8,249	\$130,868
FY 2017	4,562	3,140	7,702	\$108,765
YTD 2018	2,267	1,373	3,640	
TOTAL	15,854	8,972	24,826	\$344,379

Approximately 95% of Volunteer Hours occur during business hours and employees receive paid time

Approximately 75% of Ambassador Hours occur during business hours and employees receive paid time

Jax City Events JEA has Sposnored

- **World of Nations**
- **City of Jacksonville Veterans Parade**
- **Earth Day**
- **City of Jacksonville Environmental Symposium**
- **Senior Expo**
- **Water Festival at MOSH**
- **Back to School Rally**
- **Mayor's Environmental Awards Luncheon**
- **Martin Luther King Jr. Breakfast**

JEA Volunteer Community Partners/Projects

Pine Castle	Earth Day	American Diabetes Association	Lutheran Social Services	July 5th Beaches Clean-up	Five Star Veterans Center
Second Harvest Food Drive	Dignity U Wear	MathCounts Foundation	Greenscape	Jax Family and Community Expo	Jacksonville Sea and Sky Show
Big Brothers Big Sisters	American Cancer Society	Tree Hill Nature Reserve	Aging True at Cathedral Terrace	Fridays in the Park	FIRST Lego League Tournament
ARC Jacksonville	Gate River Run	United Way	Special Olympics	Back to School Give-away	Arlington Arboretum
Hubbard House	March of Dimes	First Coast No More Homeless Pets	DLC Nurse and Learn	City Rescue Mission	Museum of Science and History
Habijax	National Multiple Sclerosis Society	Feeding NE Florida Food Bank	Hart Felt Ministeries	Teach Coast Conference	HandsOn Jax
Clara White Mission	Family Support Services	Donna Hicken Foundation	City of Jacksonville River Clean up	Catty Shack Wildlife Sanctuary	Miracle on Ashley Street
Sulzbacher Center for the Homeless	American Red Cross	NE Florida Regional Science and Engineering Fair	Rethreaded	City of Jax Senior Games	Dragon Boat Festival
Salvation Army	All Saints Learning Center	Lupus Foundation of America	Jacksonville Jazz Festival	Making Strides Against Cancer	PACE Center for Girls
Susan B. Koman	Community Connections	One Spark	Teacher's Supply Depot	MD Walk	TourDeCure
Girls Inc	Children's Home Society	Trinity Rescue Mission	Second Harvest Food Bank	Natural Life Music Festival	Builders Care

Ambassador Community Partners/Events and Speaking Engagements

Junior Achievement	Teach Conference	Tree of Trails	Mayport Energy Action Month	Florida Urban Forestry Council	FSCJ Arbor Day
Home and Patio Show	World of Nations	Operation New Hope Fall Festival	Greenleaf Tree Planting	Rufus Payne Science Fair	Talking Trees Nature Club
Earth Day	City of Jacksonville Veterans Parade	Energy Star World Tour	TEDTalks	Black Expo	The ARC of Jacksonville
World of Nations	Arbor Day/Greenscape Tree Giveaway	National Association of Railway Business Women	web.com Resource Fair	SP Livingston Science Fair	Brown Girls Rock
Hispanic Expo	Southside Robotics Club	Southern Women's Show	NAS Jax Squadron Stand Down	JHA FOG Program	Metro North Community Advisory Council
Jacksonville Science Festival	JEA Power Pals	Community Hospice Caregiver Expo	Oakley St Tree Planting	Job Corp Career Fair	JEA Pastor's Luncheon
Fair Housing for House Seekers Conf.	JEA Non-Profit Breakfast	Jacksonville Science Festival	Manatee Celebration	Arlington Masonic Assoc.	Eco-Latino
Yulee Primary School STEM Night	Southside United Methodist Church	John E Love Career Day	Long Branch Career Day	Rotary Club of East Arlington	Society of American Military Engineers
Garden and Arts Festival	Ponte Vedra Rotary	Ft Caroline Career Fair	National Assoc of Women In Science	Deutsche Bank	Duval Co. Health Dept. Resource Fair
Fl Foresters Annual Meeting	Jacksonville Aqua Festival	South West CPAC	Jax Beach Career Fair	Mental Health Conference	Bryan Jennings Career Fair
Senior Day at JEA	Arlington Heights STEM Night	Northwest CPAC	Biscayne Career Fair	St. Paul Community Fair	Young Women of Color Empowerment Fair
Ruth Upson Career Day	Florida STEM Expo	Lone Star High Career Day	Bartram Springs Career Fair	John E Ford Career Day	Storm Preparedness Summit
National Senior Health Conference	Tiger Academy Career Day	Touch a Truck Community Event	Florida Project Learning Tree	Lego Robotics Summer Camp	Fidelity Safety Fair
Tote Maritime Safety Fair	JP Morgan Chase Storm Expo	Montgomery Solar Field Ribbon Cutting	STEM Conference Awards	Men's Health Fair	Nocatee Farmer's Market
JEA Youth Energy Academy	Jax Humane Society	Independent Living Resource Conference	Jr. Engineering STEM Conference	Southeast CPAC	St. Andrews Presbyterian Church
Shiva Robotics Academy	Communities in School	Homeowner/Home Buyer Expo	Duval Soil and Water Conservation Group	YMCA Thingamajig	One Spark
City of Jax Environmental Symposium	US Green Building Council	National Drive Electric Day	NFACCA Safety Fair	Emmett Reed Community Center	Earth Day at the Zoon
Jim Fortuna Senior Center Open House	ShadCo Meeting Sector Foxtrot	NE Fl Advancing Women in Transportation	United Way Real Sense Tax Season Kickoff	River City Science Academy High	First Coast Manufacturers Association
US Green Building	Masonic Lodge	R.A.P. Board Meeting	Woodland Acres Tree Planting	Fl Urban Forestry Council Workshop	Family Foundation Wise Money Week
Jax Golf/Country Club Safety Expo	Enterprise Academy Science Night	Hurricane Expo	Landlords Association Meeting	Leroy Clemens Senior Center	EWC Career Symposium
Stanton High School Robotics	Jax Chamber Arlington Council	Reddie Palm Tree Reserve Planting	Boscilli Foundation After School Program	IFMA Conference	Youth Explosion Back 2 School
Water Education Festival	Jax Women's Leadership Forum	Construction Career Day	Ride and Drive Event	JP Morgan Chase Safety Fair	CIT Safety Fair

JEA Memberships

Organization	Activity	FY13	FY 14	FY 15	FY 16	FY 17	FY 18 YTD	Description
Amelia Island/Fernandina Chamber of Commerce	Membership	\$1,020	\$1,020	\$1,020	\$1,020	\$2,020	\$2,020	Service area industry promotion & business development
Asian American Chamber of Jacksonville	Membership	\$2,500	\$2,500	\$2,500				Service area industry promotion & business development
Associated Industries of Florida	Membership & H2O Coalition		\$7,000	\$7,000	\$7,300	\$5,000	\$2,300	Florida industry promotion & business development
Clay County Chamber of Commerce	Membership		\$5,000	\$1,100	\$1,100	\$1,100	\$1,100	Service area industry promotion, business and economic development
Clay County Economic Development	Membership			\$4,000	\$4,000	\$4,000	\$4,000	Service area industry promotion, business and economic development
Consumer Energy Alliance	Membership		\$2,500	\$2,500	\$2,500	\$2,500		Consumer energy and issues education and awareness
First Coast Hispanic Chamber of Commerce	Membership	\$2,500		\$2,500	\$2,500	\$1,500	\$1,500	Service area industry promotion & business development
First Coast Manufacturers Association	Membership	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	Regional industry promotion & business development
Florida Chamber of Commerce	Membership	\$10,000	\$15,000	\$5,000	\$10,000	\$10,000		Florida industry promotion & business development
Florida House on Capitol Hill	Membership	\$5,000	\$5,000		\$5,000	\$5,000	\$2,500	Florida education and promotion
Indo-US Chamber of Commerce	Membership	\$2,500	\$2,500		\$2,500	\$2,500	\$2,500	Service area industry promotion & business development
Jacksonville Downtown Vision	Membership/voluntary assessment	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	Downtown Jacksonville promotion, safety & property protection
Jacksonville Black Chamber of Commerce	Membership					\$2,500	\$2,500	Service area industry promotion & business development
JAX Chamber	Membership & Board of Governors	\$30,000	\$31,750	\$31,500	\$31,750	\$31,500	\$30,000	Regional industry promotion & business development
JAX USA Partnership	Membership	\$75,000	\$160,000	\$160,000	\$160,000	\$160,000	\$100,000	Jacksonville & regional economic development support
Nassau County Economic Development Board	Membership	\$5,000	\$10,000		\$5,000	\$5,000	\$5,000	Service area industry promotion, business and economic development
St. Johns County Chamber of Commerce	Membership	\$5,000	\$5,000	\$5,000	\$5,000	\$5,333	\$5,333	Service area industry promotion, business and economic development

JEA Sponsorships

Organization	Activity	FY 13	FY 14	FY 15	FY 16	FY 17	FY18 YTD	Description
American Water Works Association	AWWA Water Tower Competition Sponsorship			\$200	\$200	\$200	\$200	Competition for Middle & High school students who build water towers and are judged on a number of criteria
Associated Industries Florida	AIF Water Forum			\$3,000	\$3,000	\$5,000		Statewide water forum/education
Black Pages USA	Black Expo	\$10,500	\$10,500	\$3,500	\$3,560	\$3,577	\$3,500	Educational booth and workshop at community event
City of Jacksonville	Mayor's Environmental Luncheon	\$250	\$300	\$100	\$200			Table sponsorship
City of Jacksonville	Back to School Rally Sponsorship			\$250				Community event with JEA educational materials
City of Jacksonville	Mayor's Environmental Awards Table		\$300	\$200	\$200			Table sponsorship
City of Jacksonville	Neighborhood Summit						\$5,000	Educational booth & participation
City of Jacksonville	Veterans Parade				\$750	\$500	\$1,250	Community Event
Clara White Mission	Miracle on Ashley Street	\$500						
COJ (SMG Jax)	Hoops for Troops NBA Basketball Event Jax		\$25,000					Community-focused economic development Sponsorship
COJ Environmental Quality Division	Jacksonville Environmental Symposium Sponsorship		\$175	\$350		\$175		Table sponsorship and booth at community event
COJ Recreation & Community	World of Nations Booth Sponsorship		\$3,000	\$3,000	\$3,220	\$3,000	\$3,000	Educational booth at community event
COJ Recreation & Community	Martin Luther King, Jr. Breakfast Table	\$450	\$2,600	\$600	\$800	\$800	\$800	Table sponsorship
Community Foundation of NE Florida	TRUJAX		\$25,000					Regional Community Visioning and Identity Process
Community Hospice of Northeast Florida	Caregiver Expo Sponsorship			\$1,500	\$1,500	\$1,500	\$1,500	Educational booth at community event
Earth Day Jacksonville	Earth Day Sponsorship	\$3,000	\$3,000	\$3,000	\$3,000	\$2,000	\$2,000	Educational booth at community event
First Coast Business Alliance	2014 Minority Economic Development Week Table	\$1,000	\$500					Table sponsorship
First Coast Business Alliance	MedWeek Luncheon Table		\$500	\$500	\$250	\$500		Table sponsorship
Florida Energy Summit	Florida Department of Consumer and Agricultural Services				\$15,000			Energy summit held in Jacksonville
Florida Nursery, Growers, and Landscape Association	Florida Water Star Training Sponsorship		\$1,000					Community workshop with St. Johns River Water Management District and IFAS
Florida State College Foundation	Continuing education development at FSCJ		\$2,500					Continuing education sponsorship
Girl Scouts Gateway Council	Women of Distinction Table Sponsorship		\$1,000	\$1,000	\$1,500	\$750		Table sponsorship
Greenscape	Greenscape Table Sponsorship			\$250				Table sponsorship
IFMA Jax - International Facility Management Association	Sponsorship of the 2014 IFMA Conference		\$800					Educational booth at community event
Jacksonville Business Journal	Downtown Development Breakfast		\$300					Table sponsorship
Jacksonville Business Journal	Veterans of Influence Awards		\$450					Table sponsorship
Jacksonville Business Journal	Diversity Table Sponsorship	\$400	\$300					Table sponsorship

JEA Sponsorships

Organization	Activity	FY 13	FY 14	FY 15	FY 16	FY 17	FY18 YTD	Description
Jacksonville Community Council Inc. (JCCI)	Jacksonville 2025 Clean and Green City Sponsor	\$10,000	\$12,500	\$12,500				Partnered to sponsor study sustainability in Jacksonville
Jacksonville Science Festival	Science Festival Sponsorship			\$500	\$500	\$500	\$500	Educational booth at community event
Jacksonville Urban League	Annual Equal Opportunity Luncheon	\$1,500	\$1,500	\$1,500	\$750	\$1,500	\$2,000	Table sponsorship
JASMYN	2014 Coming Out Day Breakfast Table Sponsorship	\$500	\$500	\$500	\$525	\$500	\$500	Table sponsorship
Jax Area Legal Aide	Equal Justice Awards		\$1,000	\$1,000				Table sponsorship
JAX Chamber	Annual Meeting				\$500		\$400	Sponsorship
JAX Chamber	Downtown Marketing Collaborative	\$25,000						Downtown Marketing Initiative
JAX Chamber	Energy & Infrastructure Policy Forum	\$480						Energy & infrastructure policy forum
JAX Chamber	Military Appreciation	\$350			\$400	\$450	\$450	Table sponsorship
JAX Chamber	State of City Luncheon	\$280		\$320				Table sponsorship
JAX Chamber Foundation	Longest Table Event						\$1,000	Community relationships - longest table event
JAX USA Partnership	Quarterly Luncheons	\$900	\$1,350	\$450	\$300	\$250		Table sponsorship
Leadership Florida	Community/State Leadership and Collaboration Development	\$10,000	\$10,000	\$6,000	\$6,000		\$6,000	Support for Florida and community leadership development
Leadership Jacksonville	Community leadership development	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	Support for community leadership development with a focus on issues in the community
LISC - Local Initiatives Support Corporation	Community Development Awards Celebration						\$2,500	Annual Event
Morris-Local Newspaper	Eco Latino Event Sponsorship		\$500					Educational booth at community event
Museum of Science and History	Exhibit Sponsorship of new outdoor Water Conservation	\$150,000	\$150,000	\$10,000				Required for SJRWMD Consumptive Use Permit
Northeast Florida Community Action Agency	Support for low income energy efficiency education		\$2,500	\$2,500				Support for organization with focus on weatherization, energy conservation, customer education, customer bill assistance
Northeast Florida Regional Council	NE FL Innovate 2.0						\$25,000	Innovate 2.0 Initiative
One Jax	2014 Humanitarian Awards Dinner Sponsorship		\$2,500		\$3,000	\$3,000		Table sponsorship
PACE Center for Girls	Portraits of PACE Luncheon Sponsorship			\$500	\$500	\$500	\$500	Table sponsorship
Second Harvest Food Bank	Empty Bowls Table Sponsorship		\$600					Table sponsorship
St. Johns County Chamber of Commerce	State of the County lunch		\$325					St. Johns Chamber lunch sponsorship
The Arc Jacksonville	Running of the Bulls Sponsorship			\$500				Booth sponsorship
The Business Journals	Partners in Philanthropy - UW Luncheon Table Sponsorship			\$450				Table sponsorship
The H.I.L.L. of NE Florida	Las Voces Table Sponsorship		\$500	\$250	\$250			Table sponsorship
United Negro College Fund	UNCF Annual Leaders' Luncheon Table	\$200	\$1,500	\$500	\$1,000	\$1,000	\$1,500	Table sponsorship

JEA Sponsorships

Organization	Activity	FY 13	FY 14	FY 15	FY 16	FY 17	FY18 YTD	Description
United Way	Sponsorship of Real Sense Financial Workshops at Downtown Payment Center			\$5,000				Program to assist low income customers with budgeting and financial literacy
United Way Of Northeast Florida	2014 United Way Annual Meeting and Campaign Celebration		\$320			\$225		Table sponsorship
United Way Of Northeast Florida	2014 Community Campaign Kick-Off Luncheon Table Sponsorship		\$400					Table sponsorship
Urban Land Institute	Energy Event: Future of NE FL		\$1,000					Event Sponsorship focusing on energy
Urban Land Institute	Infrastructure Event	\$1,000	\$1,000					Event Sponsorship focusing on energy
Greater Jacksonville USO	USO Military Appreciation		\$10,000		\$5,000	\$5,000		Military Appreciation Event
WJCT	TEACH Event Booth Sponsor		\$750	\$750	\$750	\$750	\$750	Educational booth at community event



Customer Assistance Programs

April 2018

JEA Customer Assistance Programs

Executive Summary

More than 56,000 households in Jacksonville struggle to make ends meet. According to a report in the Florida Times Union on the U.S. Census Bureau data, two out of five Duval County residents live in poverty or on poverty's edge (Pantazi, 2015). In Jacksonville, 16% live below the poverty level, compared to 15.7% of Florida and 13.5% of the U.S. population (United States Census Bureau, 2016). This should matter to JEA when income is a key qualifier for individuals that find themselves standing in line for agency assistance. JEA's key strategic initiative *earn customer loyalty*, directs the organization to provide an opportunity to improve the economic viability of utility services for low-income households.

Defining those that fall within low-income parameters, requires the establishment of a baseline that examines income. In 2015, the median household income in the United States was \$53,889 (United States Census Bureau, 2017). Median household income for the State of Florida (2011-2015) was \$47,507 (United States Census Bureau, 2017). A single mom earning Florida's \$8.05 minimum hourly wage and working 40 hours a week, or 2,086 hours a year, brings home a gross annual salary of \$16,790. Based on her income, she and her child live slightly above the \$15,510 poverty level.

In 2014, the United Way introduced a poverty-elimination initiative that exposes the true depth of poverty. Called ALICE, *Asset Limited, Income-Constrained, Employed*, the project notes that a portion of this population make too much money to meet the federal poverty guideline. Any yet, ALICE lags behind in paying bills and meeting the financial demands of the household. According to an updated report, ALICE consists of 32% of Duval County residents who fall below the poverty line (Florida, 2017).

Those individuals and households that struggle paycheck-to-paycheck, live one emergency away from a crisis. Adding ALICE to the mix brings the total to approximately 50,000 individuals at 2.6 individuals per household or 19,230 households living at or below the poverty level within JEA's service territory. Any change in ALICE financial situation, just one crisis, could be the straw that breaks the camel's back. It is no wonder that ALICE lives in 'survival budget' mentality.

Utilities are basic needs, much like food and housing. In May 2017, National Public Radio reported from Washington about a proposed budget cut intention and the potential effect on food stamps, or SNAP, the *Supplemental Nutrition Program* (NPR, 2017).

The purported budget calls for a 25% cut in SNAP funding over the next decade. NPR reported for 2017:

- In the United States, some 42 million get help from SNAP.
- Two-thirds of people on SNAP include children, the elderly and disabled.
- SNAP recipients must work 20-hours a week within three months of application.
- Of people using SNAP, 44% have at least one person in the family working.
- Among SNAP recipients, 55% of *families with children* include a person who is working.
- 52% of fast food workers rely on SNAP (UC Berkeley Labor Center, 2013).
- Six percent of families on SNAP also rely on welfare.

“Housing First” is the rallying cry of Jacksonville nonprofit, Catholic Charities. As rental rates continue to rise coincident with reductions in federal and state subsidies, the call-out deserves to be heard. The National Low Income Housing Coalition’s “Out of Reach” report focuses on the gap between wages and housing cost (Groover, 2017). The data leads to the following conclusions:

- Minimum wage makes it impossible to afford a modest and safe rental home.
- In housing policy, the standard for affordable housing is 30% of income.
- Spending 50% of income on housing is more the norm.
- Housing, food and other costs have outpaced the price needed for a living wage.
- Minimum wage workers are getting older, 50% are over 30 and 25% have children.
- Minimum wage workers are disproportionately women and people of color.

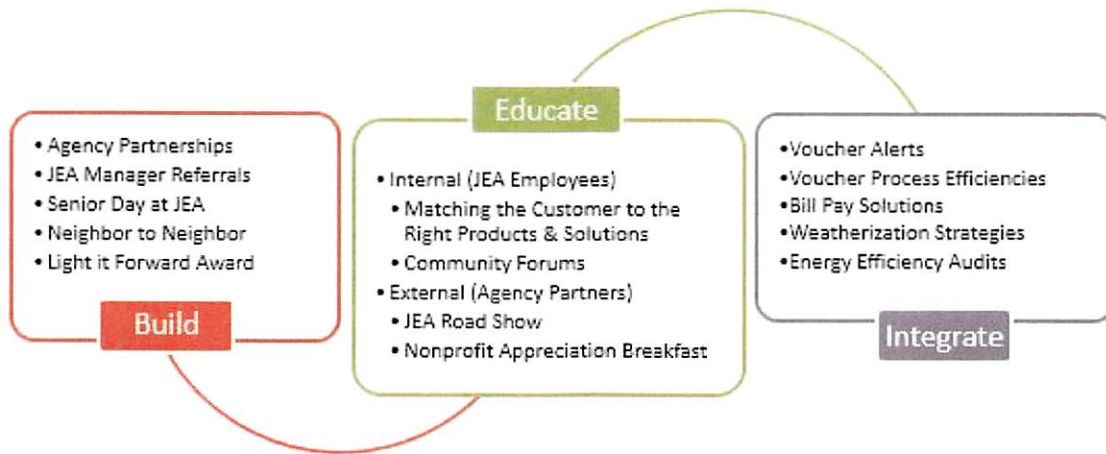
“An extremely low income household cannot afford the average rent for a modest one-bedroom apartment in any state,” the group writes in its report. “The struggle is even more daunting for the 5.5 million people with disabilities who rely on Supplemental Security Income (SSI). An individual relying on Federal SSI in 2017 can afford a monthly rent of no more than \$221” (Groover, 2017).

For comparison sake, the rental market in Duval County bodes similar disparity. Effective January 1, 2016, the minimum wage in Florida is \$8.05 per hour. A full-time minimum wage worker brings home a gross income of \$1292 a month. A Duval County minimum wage earner would need to spend over 60% of their budget to afford the average rent for a one-bedroom apartment at \$791 a month (U.S. Department of Housing and Urban Development, 2016). With all of the constraints and obstacles facing the low-income population, how will JEA customers continue to pay the utility bill?

In 2014, to gain ground and make an impact JEA took a leap in creating the Customer Assistance Programs Department. The department consists of manager and two customer care consultants whose primary responsibility is processing vouchers from agencies for

utility bill assistance. The manager is accountable for the establishing of programs for low-income customers and increasing donations to the Neighbor to Neighbor Fund.

JEA's Customer Assistance Programs has developed an interconnected framework to positively address the low-income population seeking utility bill solutions. Working internally and externally, the plan includes three main components: *build, educate and integrate*.



The program's objective is to improve the economic viability of utility services for low-income families through:

- The support of **financial literacy initiatives** and solutions for low income customers.
- Educating families on conservation and bill pay solutions that best fit their needs
- Increasing customer and employee donations to the Neighbor to Neighbor Fund.
- **Deepening relationships with community partners** that provide financial support to low and moderate income families.
- Equipping **JEA Customer Care Consultants with tools** to simplify the agency referral process.

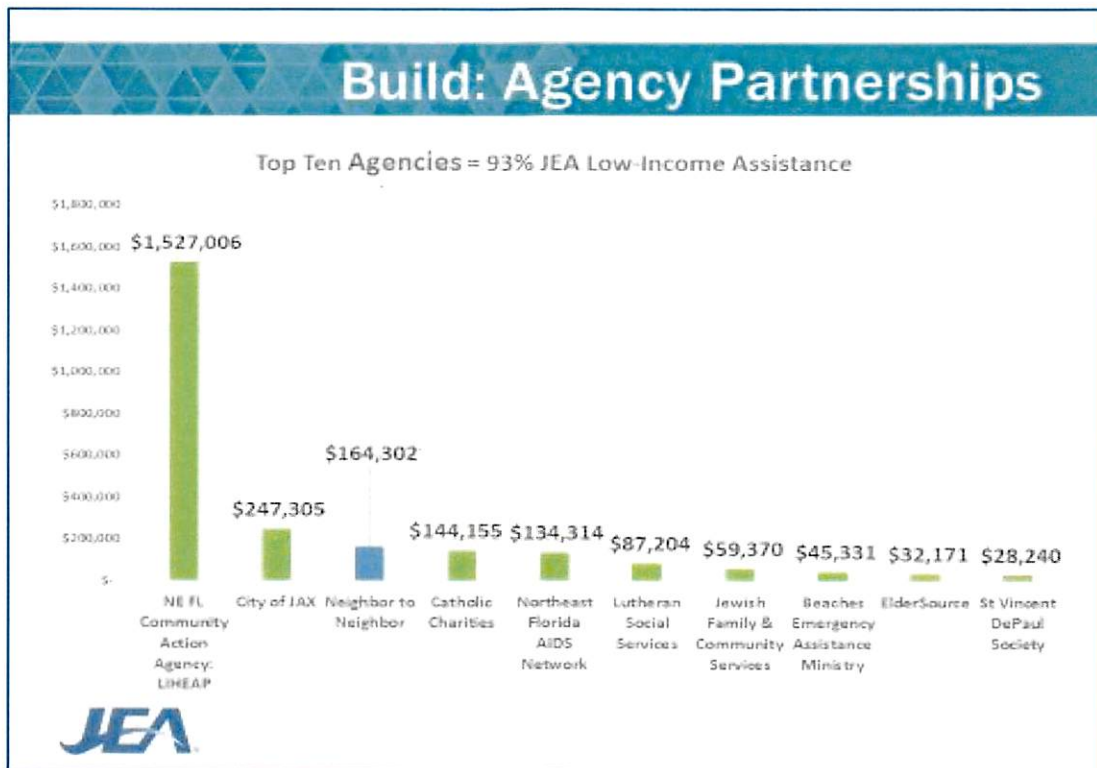
Short-term goals from 2014-2018 include the timely processing of agency vouchers, monitoring and reporting annual Neighbor to Neighbor dollars, achieving 1st Quartile JD Power performance and advancing/adding new program partnerships.

Build

JEA is committed to developing creative methods that grow funds to support low-income customer assistance. Unfortunately, agency funding for utility assistance is trending downward due to reductions in federal, state, local funding and charitable contributions. In FY 17, the JEA customer assistance team processed 8,431 vouchers totaling \$2,646,011.

FY 17 Funding Source	Total Customers Assisted	Financial Total	Percent
Neighbor to Neighbor Fund	543	164,022	6%
Social and Health Organizations	1,648	\$516,830	20%
Faith-Based Organizations	1,488	\$438,153	16%
Federal (LIHEAP)	4,752	\$1,527,006	58%
TOTAL	8,431	\$2,646,011	100%





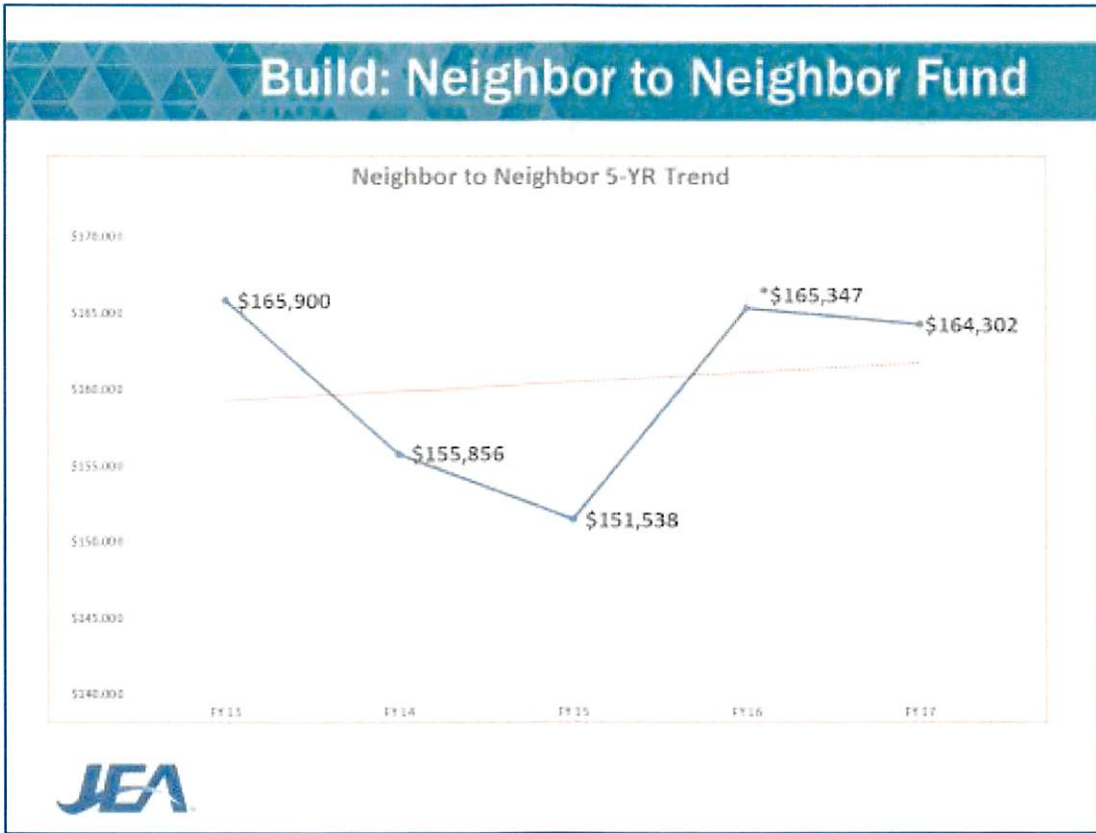
Ten nonprofit agencies and funds provide 93% of JEA's low-income assistance with Neighbor to Neighbor ranking number three.

As funds for utility assistance fall short, creative and practical community partner efforts allow JEA to provide low-income customers with new and relevant solutions.

Neighbor to Neighbor

JEA's Neighbor to Neighbor Fund was founded in 1987 by the City of Jacksonville and JEA to assist elderly, disabled and low-income citizens in our community pay for emergency, energy-related needs. The United Way of Northeast Florida transfers Neighbor to Neighbor funds to Catholic Charities for administering to eligible recipients. Neither agency receives payment for managing the fund.

In FY 17, 543 low-income JEA customers received approximately \$300 per person in utility bill assistance because of the Neighbor to Neighbor fund. That same year the fund contributions came from a monthly average of 4,800 JEA residential customers in addition to JEA employees who combined contributed approximately \$13,692 every 30-days.



Catholic Charities

The United Way through its contractor, Catholic Charities, administers the distribution of Neighbor to Neighbor donations to persons in need of utility assistance. Catholic Charities is a private nonprofit agency that dedicates nearly 50% of their annual expenditures to emergency assistance and homeless prevention. Because of this, the agency receives contributions from sources in addition to the United Way and allocates a portion of those contributions to emergency utility assistance. JEA's Neighbor to Neighbor contributions equaled \$164,022 in FY 17 versus \$165,900 in FY 16.

To be eligible for assistance, the client must experience a financial crisis that results in the inability to pay basic housing needs. Additionally, the client is either one or more months behind in rent/mortgage or utility payments, has received a three-day or eviction notice, utility disconnect notice or is without service. JEA is provided with two manager referrals per month for internal escalated cases.

Beyond the Neighbor to Neighbor fund distribution, Catholic Charities provides a job training and placement, a food shelf, along with additional utility assistance to agency-

qualified individuals and families through their in-house operation of the Donna Foundation, People Living with HIV/AIDS and Affected Community (PLWHAA) and a federally funded program for veterans and their families.

The City of Jacksonville

The City of Jacksonville's (COJ) Behavioral and Human Services Division (City Welfare) provides an Emergency Assistance Program to serve eligible households and individuals who are facing financial difficulties due to an unexpected emergency. The crisis generally involves the loss of a job, loss or reduction of household income, unexpected medical expenses, car repairs, and a family dissolution, death in the family or an expense due to foreclosure, condemnation, fire or disaster. The program provides temporary financial assistance to prevent eviction for non-payment of rent/mortgage or interruption of utilities.

The Senior Services Division of the City administers Federal Funds from the Emergency Home Energy Assistance for the Elderly Program fund (EHEAP). EHEAP requires at least one person in the residence must be age 60 or older and experiencing a home energy emergency such as difficulty keeping his or her utility bill paid. The energy emergency could be the receipt of a pending shut off notice, lack of fuel or wood or an unusually high utility bill resulting from a severely hot summer or harsh cold winter. In order to qualify for assistance, the household must meet low-income guidelines, along with age metrics mentioned earlier. In 2016, the COJ efforts and EHEAP joined the Senior Day at JEA collaborative partnership, referenced later in this report.

Beyond low-income voucher eligibility, COJ provides utility assistance to individuals and families affected by HIV/AIDS; along with a Military Affairs and Veterans Department to process federal and local funds available for active military, veterans and their families.

Northeast Florida AIDS Network

Northeast Florida AIDS Network (NFAN) was established in 1989 as a regional community based organization responsible for the planning and coordination of HIV/AIDS services in Northeast Florida. As of today, NFAN is the longest standing community based AIDS services organization in Northeast Florida.

ElderSource

ElderSource is a private, not for profit, independent agency that is part of a nation-wide network of over 650 Area Agencies on Aging. ElderSource funding comes from federal, state and local grants as well as private donations and endowments.

ElderSource caseworkers participate in Senior Day at JEA with funds from the Delores Barr Weaver “Senior to Senior” fund. Caseworkers determine eligibility for seniors whose income is over federal government poverty income regulations. The agency caseworker may also assist seniors with suggestions for ancillary services such as food, medical needs, etc. JEA staff participate monthly in the agency’s community partner think-tank “Senior Roundtable”.

Family Foundations

Family Foundations is the city’s provider of the First Time Homebuyer Education Program. Participants seeking to qualify for a home mortgage under the program receive training in JEA’s Savings without Sacrifice. For those that purchase a home, new owners receive at closing a ‘JEA Welcome Home!’ gift of energy saving tips and light bulbs.

JEA teamed up with the agency in 2015 to provide an in-service workshop for Family Foundation’s counselors. Topics range from JEA bill pay solutions to tips on how to diagnose a high bill. JEA also covers how to assist customers in energy efficiency and weatherization practices. Because of the collaborative partnership efforts, Family Foundations awarded JEA the 2015 ‘Wise Money Corporate Award’.

Northeast Florida Community Action Agency

The Federal Government distributes Low Income Heating and Energy Assistance Program (LIHEAP) funding that serves more than six million households with home heating and cooling assistance, weatherization, and/or energy-related low-cost home repairs or replacements. More than 70 percent of LIHEAP households have at least one person who is elderly, disabled or is a family with a child in the home. LIHEAP is success in reducing the burden of energy for millions of families and vulnerable persons, a testament to the program’s efficacy.

The Federal Government through LIHEAP assists low-income households with immediate and emergency home energy needs. Northeast Florida Community Action Agency (NFCAA) administers the local funding and makes direct payments to JEA for qualifying families. NFCAA targets families in need, and based on the funding requirements, targets the elderly, persons with disabilities and households with children under the age of five. Low-income eligibility is 150 percent of Federal Poverty Guidelines. To qualify for LIHEAP funding, low-income households have several opportunities:

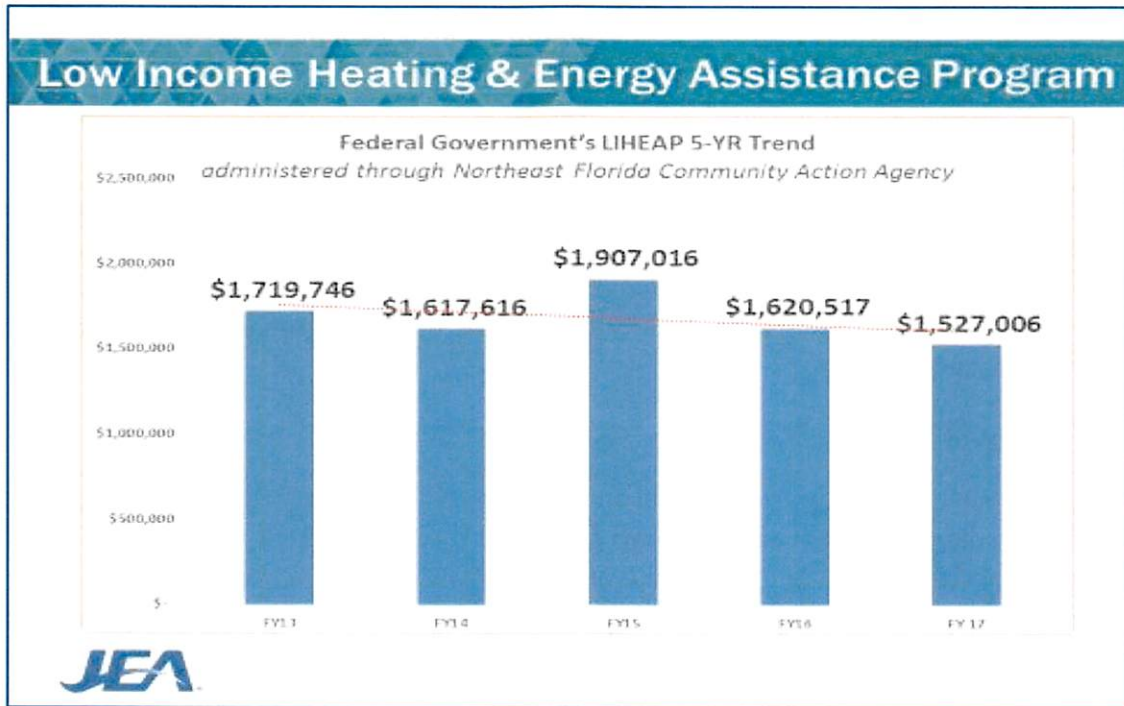
Home Crisis Energy Benefit

...is income-based and capped at 150% of the Federal Poverty Guidelines. The benefit pays a minimum of \$150 and maximum of \$300 (with an added \$75 for households with children under five, \$50 for individuals with disabilities and \$50 for senior citizens 60+) for a maximum one-time crisis payment of \$475.

Home Energy Heating and Cooling Benefit

...is available twice a year (once during the summer months and once during the winter months) for households that have experienced a disconnection or disconnection warning notice. Households are eligible based on income to receive a maximum of \$600 twice a year.

NFCAA also provides weatherization, financial education (via United Way's RealSense) along with utility assistance to individuals and families through a federally funded program for veterans and their families. Since February 2015, NFCAA has been a collaborative partner for Senior Day at JEA.



United Way 2-1-1

JEA customers that have experienced a recent crisis or loss of income may be eligible for possible utility bill assistance. Customers go through a detailed screening process over the phone. The United Way 2-1-1 will confidentially assess the customer's situation and refer them to community resources as appropriate and available. United Way of Northeast Florida works in partnership with businesses, volunteers, community organizations and leaders to tackle critical issues facing area residents.

To find out if a JEA customer is eligible for utility assistance, customers dial 2-1-1 or 1-904-632-0600. United Way 2-1-1 is available 24 hours a day, 365 days a year, serving Northeast Florida with highly trained call specialists prepared to provide connections that callers need, including referrals for customers to agencies that may be able to assist with energy needs. When in doubt, the first call for help is 2-1-1.

United Way 2-1-1 has guided JEA in a better understanding of referral services and agency eligibility criteria for utility bill assistance. 2-1-1 provided the JEA Call Center with low-income agency education during Lunch and Learns scheduled during 2016.

2-1-1 schedules Senior Day at JEA monthly appointments and communicates documentation required for eligibility to seniors during the call.

Real \$ense

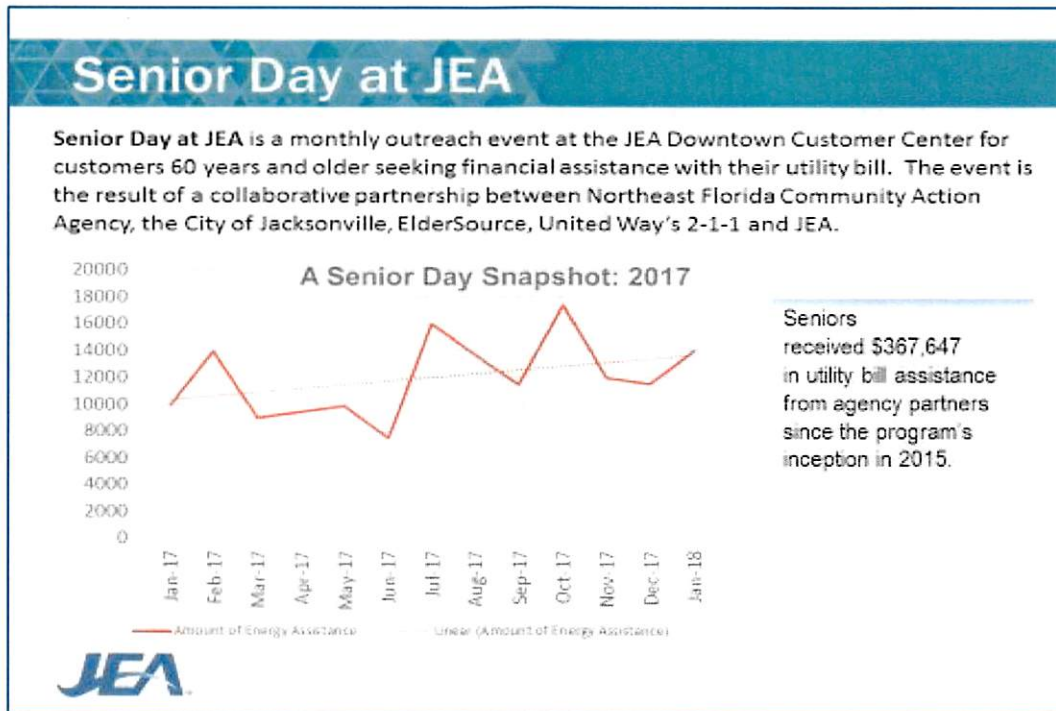
JEA promotes Real \$ense Free Tax Preparation to JEA customers. JEA refers select seniors from Senior Day at JEA to Real \$ense Money \$marts workshops and one-on-one financial coaching. JEA participates on the Real \$ense Steering Committee and provides financial counselors with education on bill pay solutions for customer's high-energy bills and energy efficiency measures.

Senior Day at JEA

Senior Day is an outreach event focusing on seniors seeking financial assistance in paying their JEA bill. Caseworkers from Northeast Florida Community Action Agency, the City of Jacksonville and ElderSource oversee eligibility and funding for the event. Northeast Florida Community Action Agency (NFCAA) administers the federal government Low Income Heating and Energy Assistance Program (LIHEAP), the City of Jacksonville's Senior Services Division (COJ) administers the federal government Elderly Home Energy Assistance Program (EHEAP) and ElderSource works selectively beyond the two funds with the Delores Barr Weaver Senior to Senior Fund.

The United Way's 2-1-1 schedules all appointments for Senior Day at JEA. Typically, NFCAA provide 40 seniors with appointments and the COJ work with 10 seniors. When seniors are ineligible or need additional assistance, ElderSource may work with those they have never assisted in the past and those seniors that present a specific crisis.

Since the inception of Senior Day at JEA in February 2015 through March 2018, 1,002 seniors age 60+ have received \$367,647 in federal and Senior-to-Senior utility bill assistance, an average of \$367 in bill assistance per senior.



Senior Day recipients also gain from a referral to JEA's Neighborhood Energy Efficiency (NEE) program. From October 2015 through March 2018, 215 seniors have been referred to receive the free audit and product installation of which 199 have benefitted from services valued at \$426 each, totaling \$84,774. In addition, 25 of those same seniors qualified for JEA attic insulation valued at \$987 each, totaling \$24,675. The total invested in JEA NEE Senior Day referrals since inception through March 2018 equals \$109,449.

Senior Day targeted accounts include JEA residential customers 60+ years old, who meet income-based Federal Government guidelines (150% of the Federal Poverty Level) and are in 1) double bill status or 2) are experiencing a documented crisis (i.e. they have received a letter or bill that includes a disconnect date or states they are in danger of disconnection).

JEA serves as an outreach host for Senior Day at JEA. JEA does not determine eligibility. JEA pays for up to one hour of parking at the Duval Street Garage. Senior Day eligible recipients qualify for JEA's Neighborhood Energy Efficiency (NEE) program. In special cases, JEA may recommend select seniors to the United Way's Real\$ense Money \$mart workshops or one-on-one financial coaching.



Educate

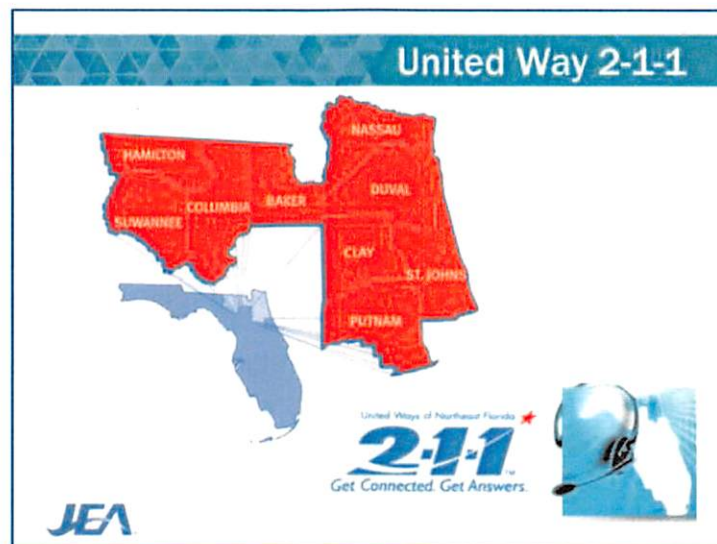
In the book, *A Framework for Understanding Poverty*, the authors' propose that 'the two things that help one move out of poverty are education and relationships' (*A Framework for Understanding Poverty*; Payne, Ph.D., DeVol, & Smith, 2011). Earning customers trust and loyalty requires shifting our thinking to focus on what matters most = building relationships so we might *teach people to fish*.

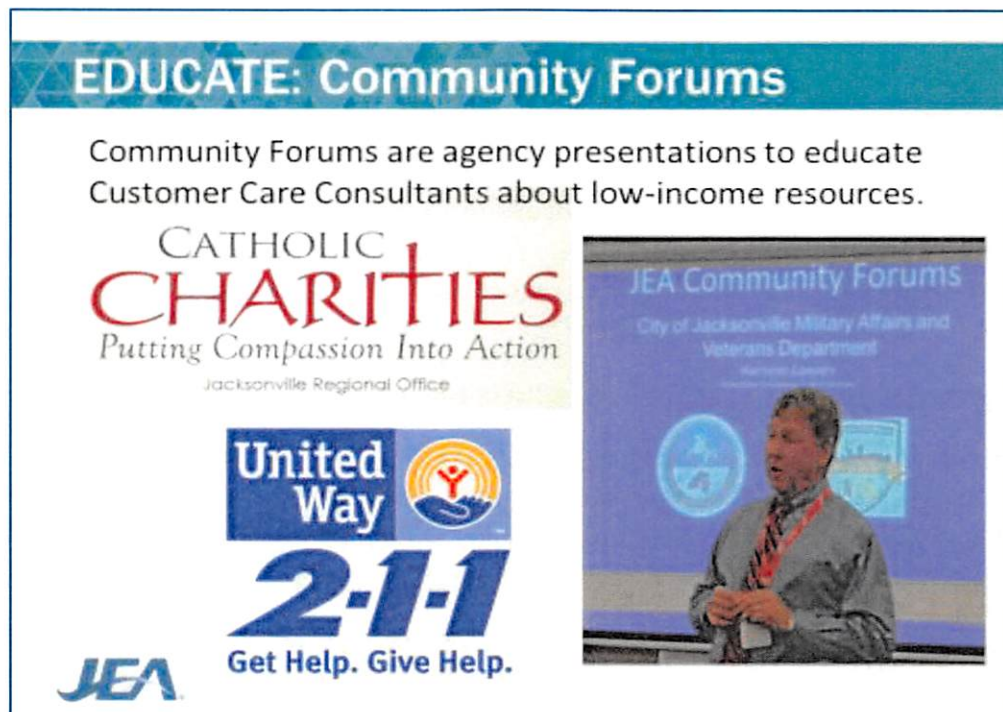
Matching the Customer to the Right Products & Services

In August 2016, a new training entitled *Matching the Customer to the Right Products and Services*, pointed customer-facing staff to solutions when working with customers during tough conversations. The training offers an introduction and the identification of benefits to JEA's products, programs and services for customers in need.

While the United Way's 2-1-1 remains the first step in seeking assistance, JEA customer care agents need resources for customers and should instruct them to call **2-1-1 (904-632-0600)**. 2-1-1 is available to speak with JEA customers 24 hours a day/7 days a week. To prepare the customer for their 2-1-1 call, agents should advise them that the following information is part of the referral process:

- Household size
- Age
- Employment status
- Household income





Community Forums

Community Forums are 30-minute agency presentations designed to assist JEA’s customer-facing staff in learning more about resources available to low-income customers. Community Forum’s consist of a short 10-15 minute presentation followed by questions or comments. While [United Way’s 2-1-1](#) is always the first call for help, Community Forums introduce staff to agency partners working on the frontline to assist our most vulnerable community households.

Nonprofit Appreciation Breakfast

JEA hosts an annual breakfast recognizing the assistance provided by voucher partner agencies. The event cultivates the relationship between JEA’s CEO, agency executives and agency front-line employees. Along with breakfast, the agency staff network with each other, meet JEA subject matter experts and learn about energy-related solutions.

Local agencies provided more than \$2.6 million in utility bill assistance to JEA customers in need in 2017. To recognize the people behind the scenes who make this happen every year, JEA created the **Light it Forward Award**. It honors employees who go above and beyond to help low-income customers seeking utility bill assistance. In October 2017, JEA announced the first year recipients.

JEA Light it Forward Award

JEA was honored to award three local non-profit employees who helped aid JEA customers with utility bill assistance. These are the first winners of the Light it Forward Award.

**Alice Davis, Housing Case Manager,
Northeast Florida AIDS Network**

Alice Davis helps clients who are HIV positive secure federal funding to pay their mortgage or rent and utility bill. "Sometimes they have to choose between the lights and eating," she said. "They must eat, so the lights get a far behind they need help. And that's what I do." Alice was nominated for this award by the nonprofit's executive director because she provides the best care she can for people living with HIV in Jacksonville.



**Phyllis Kennelroe, Customer Service Specialist,
ElderSource**

Phyllis Kennelroe is so personable she often makes friends with the seniors she helps through ElderSource. "I think they think I'm their daughter," she said laughing. "Some call me once a month to check on me." ElderSource is a nonprofit that helps the aging and disabled in a crisis. Phyllis was nominated for this award by her supervisor because of her compassion and hard work.



**Cynthia Robinson, Clerical Support,
OBI, Emergency Home Energy Assistance Program**

Cynthia Robinson is determined to take care of the senior citizens she comes in contact with by making sure they get the resources they need to pay their JEA bill. She processes vouchers for seniors in crisis - elderly JEA customers with double bills that are close to disconnection. Cynthia's supervisor nominated her for this award because of her great compassion, dedication and love for the seniors she serves.



Integrate

JEA integrates internal existing and evolving solutions for low-income customers that include bill and payment options and conservation efforts. Not every solution fits every low-income customer's need. Examples of delineating factors to consider applying these solutions to the low-income customer include renter versus home own, fixed- versus salaried- income, etc.

Existing solutions for bill and payment options include programs such as:

- Pay plans
- Pay arrangements
- MyBudget, a levelized billing and payment plan
- MyWay, a pay-as-you-go payment plan
- Approximately \$7M annually is appropriated towards conservation efforts that include (but are not limited to):
 - Energy efficiency commercial and residential rebates
 - Energy efficiency products – lighting (LED mark down)
 - In-house audits – free to residential customers – by the JEA assessment team
 - Education (Ambassador team providing “Savings Without Sacrifice”)
 - Online tracker
 - Neighborhood Energy Efficiency
 - Electrification on-road and off-road (commercial)
 - Solar
 - Private Solar (rooftop solar panels and a net metering policy)
 - JEA SolarSmart (subscribe and pay a few extra cents per kwh to participate in JEA's green rate)
 - JEA Smart Savings

Billing and Payment Plan Solutions for JEA's Low-Income Customer

Pay Plans

Payment plans are great options for customers such as ALICE, desiring a little extra time. Customers may request an extension online at jea.com. JEA's self-serve system lets them know if they qualify and provides a new due date. If customers need more than just a few days, they may call (904) 665-6000 to discuss other options.

Pay Arrangements

Customers may sometime need more than just a few days to pay the bill. Payment arrangements provide a means for customers to pay the outstanding balance in monthly installments. Payment arrangements are typically for a duration of three to twelve months. The customer must pay a portion of the balance prior to the creation of the payment arrangement. They may request an extension online at jea.com. JEA's self-serve system lets them know if they qualify and provides a new due date. If customers need more than just a few days, they may call (904) 665-6000 to discuss other options.

JEA MyBudget

A leveled billing and payment plan for customers who are interested in financial stability without receiving a huge "true-up" bill at the end of the year. By selecting the MyBudget billing plan, customers receive a utility bill that is approximately the same amount each month. Seasonal weather patterns do not affect the bill with high and low fluctuations.

JEA's MyWay

JEA's pay-as-you-go, prepaid program provides customers with added control over their energy usage, a convenient and flexible way to pay bills and the opportunity to spend less – through personal diligence and observation - on utility services. An advantage to the low-income customer includes that there is no deposit; no late fees, no monthly bills and the elimination of reconnect fees. JEA MyWay customers can receive daily balance alerts and studies show they consume less as compared to a traditional customer. Lower consumption means savings to the customer. JEA MyWay is perfect for budget conscious consumers.

Approximately 60% of the customers enrolled in the program fall between the low to mid-income range and do not experience disconnection post enrollment. JEA MyWay customers consume less and therefore spend less on utilities after conversion from traditional service. To determine the level of savings associated with program enrollment, JEA compared customers with three months of pre- and post- enrollment consumption at the same premise. The actual effect on consumption was a 7.3% reduction. The weather-normalized effect was a 6.6% reduction of consumption.

Conservation Solutions for JEA's Low-Income Customer

Neighborhood Energy Efficiency Program (NEE)

JEA has partnered with the City of Jacksonville's Department of Housing and Neighborhoods to assist customers in making energy and water efficiency upgrades in their homes. These customers live on low or fixed incomes in disadvantaged neighborhoods as designated by the U.S. Census Bureau.

JEA sends the Neighborhood Energy Efficiency (NEE) crew to designated neighborhoods to install energy-saving products which will help lower their utility bills, as well as give tips on how to manage electric and water usage.

Designated neighborhood residents receive a postcard explaining the NEE program. JEA sends the Neighborhood Energy Efficiency (NEE) crew out to install energy-saving products that help JEA customers better manage utility bills, as well as provide tips on how to manage electric and water usage. The NEE crew installs the following products in the homes to help improve energy and water efficiency and lower utility bills:

- LED nightlights
- Low-flow shower head(s)
- Faucet aerators
- Toilet flapper(s)
- HVAC filters
- Exterior door weather stripping
- Caulk

Neighborhood Energy Efficiency Program Attic Insulation Program

In some cases, the Neighborhood Energy Efficiency Program may install attic insulation at no charge to the low-income customer. For a home to qualify for attic insulation, it must have less than three inches of insulation and meet JEA's criteria for high winter peak consumption.

Low income customers that meet 150% of the Federal Poverty Level (Senior Day at JEA) are included in the Neighbor Energy Efficiency Audit.

Neighbor Energy Efficiency for Seniors

Low income seniors that meet 150% of the federal poverty limit are offered a home energy efficiency audit with the installation of electric and water conservation products free of charge.

JEA

Savings With Out Sacrifice

JEA's 'Savings without Sacrifice' (SWOS) is a free program delivered by JEA Ambassadors, designed to educate the community about simple ways to save money on electricity and water while preserving our earth's resources. Presentations are given that provide information and tips about utility conservation and saving on monthly utility bills. JEA works in partnership with churches, schools, and community organizations to deliver this program. JEA also trains community volunteers to conduct these community educational workshops throughout the city.

The Path Forward

To improve the economic viability of utility services for low-income households, the Customer Assistance path forward is considering the addition of the following elements:

Build

- Partner with local community groups that supply services to low income households (i.e. food shelves, job placement, financial literacy)
- Partner with ALICE, 1,000 in 1,000 and similar poverty elimination efforts

Educate

External

- Partner with agencies and training on JEA SmartSavings (Demand Rate), Savings without Sacrifice, Bill Pay Solutions
- Partner with 2-1-1, agencies, field and call center reps to create Community Resource Referrals
- Nonprofit Appreciation Breakfast Awards/Certificates
- Light it Forward!

Internal

- Fortify CCC education on assistance referrals, qualifiers and internal low-income solutions
- Partner with training for new hire orientation
- Partner with call center training huddles
- Extend training to field workers to promote 2-1-1 (Tacoma Public Utilities: Bill Assistance Internal Community Resource Referrals, 2017)

Integrate

- Voucher processing efficiencies
- Partner with agencies for JEA MyWay education

WORKS CITED

- Florida, U. W. (2017, June 2). *Duval County 2017 ALICE*. Retrieved from United Way of Northeast Florida: http://www.unitedwaynefl.org/wp-content/uploads/2017/04/2017-FL-County-Pages_Duval.pdf
- Groover, H. (2017, June 7). *The Stranger*. Retrieved from SLOG: News and Shelter: <http://www.thestranger.com/slog/2017/06/08/25201153/to-afford-a-one-bedroom-apartment-in-seattle-a-minimum-wage-worker-has-to-work-87-hours-per-week>
- Kroenke, D., & Auer, D. (2009). *Database Concepts*. New Jersey: Prentice Hall.
- NPR. (2017, May 25). NPR Newstime Live Chat. Washington, DC, United States. Retrieved June 10, 2017, from https://m.facebook.com/story.php?story_fbid=10155656946931756&id=10643211755
- Pantazi, A. (2015, September 17). *The Florida Times Union Jacksonville.com*. Retrieved from Jacksonville.com: <http://jacksonville.com/news/florida/2015-09-17/story/what-new-census-data-reveal-about-jacksonvilles-economy-poverty>
- Payne, Ph.D., R. K., DeVol, P., & Smith, T. D. (2011). *Bridges Out of Poverty: Strategies fo Professionals and Communities*. Highlands: aha! Process, Inc.
- Ruby K. Payne, P. (2005). *A Framework for Understanding Poverty*. Highlands: aha! Process, Inc.
- Stair, R., & Reynolds, G. (2001). *Principles of Information Systems*. Boston: Course Technology.
- Tacoma Public Utilities: Bill Assistance Internal Community Resource Referrals. (2017, May 23). *CS Week 41*. Retrieved from Low Income Synergy Group: <http://www.csforms.org/Synergy/2017%20Synergy%20Presentations/Low%20Income%20Synergy%202017%20PDF.pdf>
- U.S. Department of Housing and Urban Development. (2016, October 1). *2017 Fair Market Rent Documentation System - Calculation for Jacksonville, Florida*. Retrieved from HUD Office of Policy Development and Research: https://www.huduser.gov/portal/datasets/fmr/fmrs/FY2017_code/2017summary.odn
- UC Berkeley Labor Center. (2013, October 15). *Fast Food, Poverty Wages: The Public Cost of Low-Wage Jobs in the Fast-Food Industry*. Retrieved from Center for Labor Research and Education: <http://laborcenter.berkeley.edu/fast-food-poverty-wages-the-public-cost-of-low-wage-jobs-in-the-fast-food-industry/>

United States Census Bureau. (2016, September 13). *United States Census Bureau*. Retrieved from Income and Poverty in the United States: 2015: <https://www.census.gov/library/publications/2016/demo/p60-256.html>

United States Census Bureau. (2017, June 9). *Florida Median Household Income*. Retrieved from 2011-2015 American Community Survey: <https://www.census.gov/programs-surveys/acs/>

United States Census Bureau. (2017, June 9). *United States Median Household Income*. Retrieved from 2011-2015 American Community Survey: <https://www.census.gov/search-results.html?page=1&stateGeo=none&searchtype=web&cssp=SERP&q=U.S.+Household+Income&search.x=0&search.y=0>

APPENDIX

United States

2016 Population Estimates

323,127,513

Source: *Vintage 2016 Population Estimates. Population Estimates*

Median Household Income

\$ 53,889

Source: *2011-2015 American Community Survey 5-Year Estimates*

Educational Attainment: Percent high school graduate or higher

86.7 %

Source: *2011-2015 American Community Survey 5-Year Profiles*

2015 Poverty Statistics, All People Below Poverty Level Percent

13.5 %

Source: *2016 Current Population Survey, Annual Social and Economic Supplement (CPS ASEC)*

Persons without health insurance, percent

13.0 %

Source: *2011-2015 American Community Survey 5-Year Profiles*

Median Housing Value

\$ 178,600

Source: *2011-2015 American Community Survey 5-Year Estimates*

Total Housing Units

133,351,840

Source: *2011-2015 American Community Survey 5-Year Estimates*

Number of Companies

27,626,360

Source: *2012 Survey of Business Owners. Company Summary*

Veterans

20,108,332

Source: *2011-2015 American Community Survey 5-Year Profiles*

<https://www.census.gov/search-results.html?page=1&stateGeo=none&searchtype=web&cssp=SERP&q=U.S.+Household+Income&search.x=0&search.y=0>

Florida

2016 Population Estimates

20,612,439

Source: *Vintage 2016 Population Estimates: Population Estimates*

Median Household Income

\$ 47,507

Source: *2011-2015 American Community Survey 5-Year Estimates*

Persons in poverty, percent

15.7 %

Source: *2015 American Community Survey 1-Year Profiles*

Educational Attainment: Percent high school graduate or higher

86.9 %

Source: *2011-2015 American Community Survey 5-Year Profiles*

Persons without health insurance, percent

18.0 %

Source: *2011-2015 American Community Survey 5-Year Profiles*

Median Housing Value

\$ 159,000

Source: *2011-2015 American Community Survey 5-Year Estimates*

Total Housing Units

9,094,999

Source: *2011-2015 American Community Survey 5-Year Estimates*

Number of Companies

2,100,187

Source: *2012 Survey of Business Owners: Company Summary*

Male Median Income

\$ 29,548

Source: *2011-2015 American Community Survey 5-Year Estimates*

Female Median Income

\$ 20,695

Source: *2011-2015 American Community Survey 5-Year Estimates*

Veterans

1,507,738

Source: *2011-2015 American Community Survey 5-Year Profiles*

Duval County, Florida

2016 Population Estimates

926,255

Source: *Vintage 2016 Population Estimates: Population Estimates*

Median Household Income

\$ 47,690

Source: *2011-2015 American Community Survey 5-Year Estimates*

Persons in poverty, percent

16 %

Source: *2015 Small Area Income and Poverty Estimates (SAIPE)*

Educational Attainment: Percent high school graduate or higher

88.6 %

Source: *2011-2015 American Community Survey 5-Year Profiles*

Persons without health insurance, under age 65 years, percent

13.2 %

Source: *Source: 2015 Small Area Health Insurance Estimates (SAHIE)*

Median Housing Value

\$ 142,300

Source: *2011-2015 American Community Survey 5-Year Estimates*

Total Housing Units

393,571

Source: *2011-2015 American Community Survey 5-Year Estimates*

Number of Companies

75,875

Source: *2012 Survey of Business Owners: Company Summary*

Veterans

82,862

Source: *2011-2015 American Community Survey 5-Year Profiles*

<https://www.census.gov/search-results.html?page=1&stateGeo=none&searchtype=web&cssp=SERP&q=florida&search.x=o&search.y=o>

<https://www.census.gov/search-results.html?q=duval+county+fl&page=1&stateGeo=none&searchtype=web&cssp=SERP&search.x=o&search.y=o>

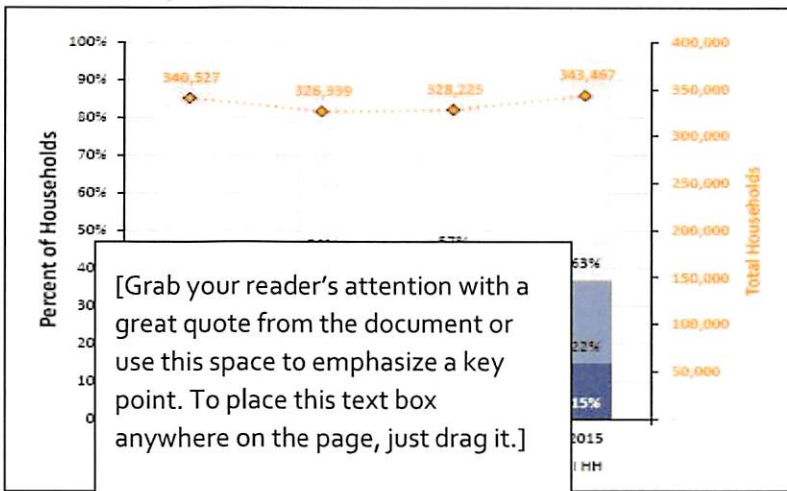
ALICE IN DUVAL COUNTY

Population: 913,010 | Number of Households: 343,467
 Median Household Income: \$49,554 (state average: \$49,426)
 Florida Underemployment Rate for 2015: 7%
 Households Below ALICE Threshold: 128,665 (37%)

How many households are struggling?

ALICE is an acronym for Asset Limited, Income Constrained, Employed – households that earn more than the Federal Poverty Level, but less than the basic cost of living for the county (the ALICE Threshold, or AT). Combined, the number of poverty and ALICE households equals the total population struggling to afford basic needs. The percentage of households below the ALICE Threshold changes over time (left axis, blue bars) as does the total number of households (right axis, dotted yellow line). The Great Recession, from 2007 to 2010, caused hardship for many families. Conditions started to improve in 2010 and 2012 for some, but not for all.

Households by Income, 2007 to 2015



[Grab your reader's attention with a great quote from the document or use this space to emphasize a key point. To place this text box anywhere on the page, just drag it.]

What does it cost to afford the basic necessities?

The bare-minimum Household Survival Budget does not include any savings, leaving a household vulnerable to unexpected expenses. ALICE households typically earn above the Federal Poverty Level of \$11,770 for a single adult and \$24,250 for a family of four, but less than the Household Survival Budget.

Household Survival Budget, Duval County

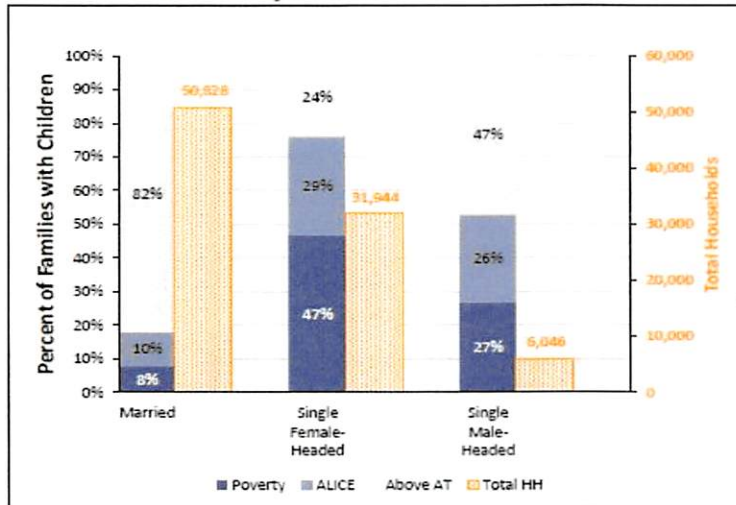
	SINGLE ADULT	2 ADULTS, 1 INFANT, 1 PRESCHOOLER
Monthly Costs		
Housing	\$628	\$931
Child Care	\$-	\$960
Food	\$165	\$547
Transportation	\$322	\$644
Health Care	\$165	\$634
Miscellaneous	\$147	\$399
Taxes	\$191	\$276
Monthly Total	\$1,618	\$4,391
ANNUAL TOTAL	\$19,416	\$52,692
POVERTY ANNUAL TOTAL	\$11,770	\$24,250

Sources: 2015 Point-in-Time Data: American Community Survey; ALICE Demographics: American Community Survey; the ALICE Threshold, Budget: U.S. Department of Housing and Urban Development (HUD); U.S. Department of Agriculture (USDA); Bureau of Labor Statistics (BLS); Internal Revenue Service (IRS); Florida Department of Education, Office of Early Learning.

How many families with children are struggling?

Children add significant expense to a family budget, so it is not surprising that many families with children live below the ALICE Threshold. Though more Duval County families are headed by married parents, a greater percent of single parent families have income below the AT (left axis, blue bar). Total number of families in each category are reflected by dotted yellow bars (right axis).

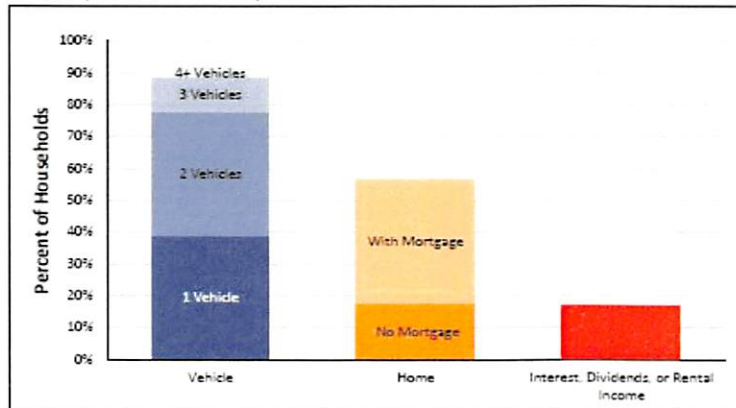
Families with Children by Income, 2015



What assets do households have?

Ownership of assets can contribute to stability of households. Yet few families in Duval County own liquid assets, such as a savings account, 401(k) plan, or rental income, that are readily available to cover emergency expenses. Vehicles, the most common asset, depreciate over time. Homeownership, the next most common asset, can build wealth, but is not a liquid asset.

Assets, All Households, 2015



Duval County, 2015		
Town	Total HH	% ALICE & Poverty
Atlantic Beach	5,477	24%
Baldwin	597	53%
Baldwin CCD	2,340	39%
Jacksonville	323,488	39%
Jacksonville Beach	10,303	27%
Jacksonville Beaches CCD	22,553	30%
Jacksonville East CCD	168,890	35%
Jacksonville North CCD	27,351	35%
Jacksonville West CCD	116,766	49%
Neptune Beach	2,948	22%

Note: Municipal-level data on this page is for Places and County Subdivisions, which include Census Designated Places (CDP), and Census County Divisions (CCD), relatively permanent statistical areas delineated cooperatively by the Census Bureau and state and local government authorities. These are overlapping geographies so totals will not match county-level data. Municipal-level data often relies on 5-year averages and is not available for the smallest towns that do not report income.

What differentiates JEA from the other utilities is our outreach and partnerships. This includes but is not limited to JEA's low-income initiatives such as...

1. The annual JEA Agency Appreciation Breakfast
2. JEA's Light it Forward Award - honoring agency caseworkers that go above and beyond
3. JEA Community Forums - introducing call center staff to low-income agency partner presentations
4. The Hurricane Irma Recovery Coalition
5. Real \$ense - free tax help, credit counseling and the financial literacy arm of United Way's 211
6. Senior Roundtable - a coalition of agency partners that meet monthly to focus on the needs of seniors
7. Senior Day at JEA (partnership between COJ, NFCAA, ElderSource, 2-1-1 and JEA) - a monthly outreach program focused on utility bill assistance for seniors 60+ years old.

Many IOUs have customer assistance programs similar to JEA's Neighbor to Neighbor:

Florida Power and Light's Care to Share program is funded by donations from businesses, charities, customers, and FPL. Similar to N2N, FPL's program was created to provide emergency financial assistance grants and funds to struggling customers who are faced with an unexpected crisis. The service is run at the local level, and it is managed by local government agencies and nonprofits that qualify customers based on criteria established by Florida Power and Light.

Xcel Energy's Reach Out for Warmth fuel fund is designed to assist low-income households along with those just above income guidelines. ROFW is funded from corporate and individual donations matched by federal funds. The fund assists households with incomes too high to qualify for Energy Assistance and provides additional help when federal funds are not enough to meet household's needs. In addition and as required by law in the state of Minnesota, Xcel Energy offers a \$15 discount for low-income customers every 30 days. This program is only available to seniors, 62 years old and/or disabled.

Tampa Electric (TECO)'s SHARE fund involves customers making voluntary, tax-deductible contributions similar to JEA's N2N fund. For every contribution made, Tampa Electric and Peoples Gas match dollar-for-dollar, up to a combined \$500,000 a year.

New Jersey Natural Gas' Gift of Warmth (GOW) is for households and customers experiencing unanticipated and/or temporary financial hardship.

JEA Capital Needs and Funding Source

Electric System (\$000s)	2019	2020	2021	2022	2023	2019- 2023 Average
Internally Generated Funds Available for Capital ¹	\$183,906	\$279,676	\$284,431	\$209,341	\$217,567	
Capital Fund Balance Withdrawals (Deposits)	142,170	(19,328)	(998)	25,464	384	
Debt Financing ²				122,840	26,938	
Draft Capital Plan Spend³	\$326,077	\$260,348	\$283,433	\$357,644	\$244,888	\$294,478
Capital Fund Balance	\$66,128	\$85,457	\$86,455	\$60,991	\$60,608	

Water and Sewer System (\$000s)	2019	2020	2021	2022	2023	2019- 2023 Average
Internally Generated Funds Available for Capital ¹	\$211,279	\$190,229	\$193,069	\$193,693	\$198,185	
Capital Fund Balance Withdrawals (Deposits)	\$30,236	\$72,700	\$26,872	\$0	\$0	
Debt Financing ²	0	0	\$44,338	\$53,091	\$34,169	
Draft Capital Plan Spend³	\$241,515	\$262,929	\$264,279	\$246,784	\$232,354	\$249,572
Capital Fund Balance	\$101,572	\$28,872	\$2,000	\$2,000	\$2,000	

¹ Internally generated funds available for capital are sourced from R&R and operating capital outlay along with surplus funds from prior budget appropriation restrictions

² Bond Issuance to fund CAPEX

³ Preliminary capital forecast as of 3/30/18. Final forecast will be presented for approval at the June 2018 Board of Directors meeting

Forecast CF

Index No	Project Owner	Service	City Rollup	Project Description	FY19 Total	FY20 Total	FY21 Total	FY22 Total	FY23 Total
428-120	D Calhoun	District Energy	District Energy System	Downtown Development	\$2,000,000	\$0	\$0	\$0	\$0
428-04	D Calhoun	District Energy	District Energy System	Facilities - District Energy System (DES)	\$858,000	\$700,000	\$700,000	\$400,000	\$500,000
428-116	D Calhoun	District Energy	District Energy System	Springfield - Additional Back-up Generator	\$415,000	\$0	\$0	\$0	\$0
428-111	D Calhoun	District Energy	District Energy System	Springfield - Replace Chiller 1	\$0	\$650,000	\$0	\$0	\$0
428-114	D Calhoun	District Energy	District Energy System	Springfield - Replace Chiller 4	\$0	\$0	\$650,000	\$0	\$0
428-117	D Calhoun	District Energy	District Energy System	Hogan's Creek - Building Rehabilitation and Paint	\$0	\$0	\$300,000	\$0	\$0
428-33	D Calhoun	District Energy	District Energy System	DES - Downtown Plant - Tower Repair and Replace (Fill)	\$0	\$0	\$133,000	\$0	\$0
428-113	D Calhoun	District Energy	District Energy System	Springfield - Replace Chiller 3	\$0	\$0	\$0	\$650,000	\$0
428-100	D Calhoun	District Energy	District Energy System	San Marco - Replace Air Cooled Chiller with Liquid Cooled	\$0	\$0	\$0	\$300,000	\$0
428-115	D Calhoun	District Energy	District Energy System	Springfield - Replace Chiller 5	\$0	\$0	\$0	\$0	\$650,000
428-118	D Calhoun	District Energy	District Energy System	Downtown - Building Rehabilitation and Paint	\$0	\$0	\$0	\$0	\$200,000
064-02H5	J Pineda	Electric	Electric Generation	Unit B52 Advanced Gas Path Upgrade	\$27,798,000	\$0	\$0	\$0	\$0
064-03H5	J Pineda	Electric	Electric Generation	Unit B53 Advanced Gas Path Upgrade	\$27,798,000	\$0	\$0	\$0	\$0
068-32	J Pineda	Electric	Electric Generation	Brandy Branch - Advanced Gas Path Capital Improvements	\$8,419,000	\$0	\$0	\$0	\$0
069-02H1	J Pineda	Electric	Electric Generation	Kennedy Combustion Turbine Unit 8 - Hot Gas Path Inspection	\$6,300,000	\$0	\$0	\$0	\$0
068-33	J Pineda	Electric	Electric Generation	Brandy Branch - Units 2 and 3 Evaporator Replacement	\$5,766,000	\$0	\$0	\$0	\$0
084-11	S McInall	Electric	Electric Generation	Greenland 2X1 Combined Cycle Completion	\$5,000,000	\$10,000,000	\$150,000,000	\$250,000,000	\$118,000,000
060-179	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Unit 1 and 2 Circulating Fluidized-Bed Boilers - Gas Lance Installation	\$4,744,000	\$1,221,000	\$0	\$0	\$0
060-04	G Gilchrist	Electric	Electric Generation	Northside - Units 1, 2, and 3 Capital Improvement Projects	\$4,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000
060-166	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Unit N36 Major Inspection FY2019	\$3,000,000	\$0	\$0	\$0	\$0
060-175	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Unit 3 Economizer Replacement	\$2,680,000	\$6,077,000	\$0	\$0	\$0
062-01	G Gilchrist	Electric	Electric Generation	Steam Plant General Capital Improvements	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
068-01	J Pineda	Electric	Electric Generation	Brandy Branch - Greenland Energy Center - General Capital Improvements	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
068-34	J Pineda	Electric	Electric Generation	Brandy Branch - Unit B54 Heat Recovery Steam Generator - Transition Duct Replacement	\$1,823,000	\$0	\$0	\$0	\$0
068-26	J Pineda	Electric	Electric Generation	Brandy Branch - Cooling Tower Fan Blades and Drift Eliminators - Replacement	\$1,000,000	\$0	\$0	\$0	\$0
060-160	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Units N01, N02 - EX2000 Digital Front end (DFE) Upgrade	\$929,000	\$0	\$0	\$0	\$0
068-27	J Pineda	Electric	Electric Generation	Brandy Branch - Unit B51 Exhaust Stack Silencer Replacement	\$823,000	\$0	\$0	\$0	\$0
068-28	J Pineda	Electric	Electric Generation	Brandy Branch - Units B51, 52, 53 - Static Starter Digital Front End (DFE) Upgrade	\$773,000	\$0	\$0	\$0	\$0
060-159	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Units N01, N02 - Boiler Feed Pumps, and Circulating Fluidized-Bed Boilers Fans, Ben	\$694,000	\$0	\$0	\$0	\$0
066-30	J Pineda	Electric	Electric Generation	Brandy Branch - Units B52, 53 - Main Steam Manual Gate Valve Replacement	\$650,000	\$0	\$0	\$0	\$0
069-05	J Pineda	Electric	Electric Generation	Kennedy Unit 30 - Control Room Upgrade	\$618,000	\$20,000	\$0	\$0	\$0
060-165	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Unit 1 Circulating Water Piping Replacement	\$580,000	\$1,493,000	\$0	\$0	\$0
060-153	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Fly Ash/Bed Ash Silos 1 and 2 Slurry Pump and Piping Replacement	\$556,667	\$0	\$0	\$0	\$0
060-176	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Unit N03 Condenser Inlet Valve Replacement	\$510,000	\$248,000	\$0	\$0	\$0
068-29	J Pineda	Electric	Electric Generation	Brandy Branch - Units B51, 52, 53, 54 - EX2000 Digital Front End (DFE) Upgrade	\$500,000	\$0	\$0	\$0	\$0
060-167	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Units N33, N34, N35, N36 DCS Control System Upgrade	\$456,000	\$424,000	\$392,000	\$392,000	\$0
060-162	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Unit N00 Limestone Utilization Improvement	\$446,000	\$0	\$0	\$0	\$0
060-168	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Circulating Fluidized-Bed Boiler Simulator Replacement	\$444,000	\$848,000	\$0	\$0	\$0
060-170	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Unit N02 Cyclone Crossover Expansion Joint Repair	\$389,000	\$424,000	\$0	\$0	\$0
069-06	J Pineda	Electric	Electric Generation	Kennedy Generating Station - Unit K30 - SUS-3 480V Switchgear Modernization	\$336,000	\$0	\$0	\$0	\$0
060-164	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Unit 3 Reliability Improvements	\$300,000	\$1,868,000	\$0	\$0	\$0
709-03H3	J Pineda	Electric	Electric Generation	Kennedy Combustion Turbine Unit 7 - Hot Gas Path Inspection	\$250,000	\$5,318,000	\$0	\$0	\$0
060-169	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Units N33, N34, N35, N36 Electrical Equipment Upgrades	\$243,000	\$220,000	\$220,000	\$220,000	\$0
060-171	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Units N01, N02 Battery Charger Replacement	\$241,000	\$87,000	\$0	\$0	\$0
060-172	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Units N01, N02 Seal Pot Air to Intrex Damper Upgrade	\$210,000	\$54,000	\$0	\$0	\$0
060-178	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Unit N03 Instrument Upgrade	\$205,000	\$109,000	\$0	\$0	\$0
060-173	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Unit N00 Fire Alarm Control Panel Upgrade	\$202,000	\$0	\$0	\$0	\$0
060-177	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Unit N03 River Water Booster Pump Replacement	\$147,000	\$454,000	\$0	\$0	\$0
068-23	J Pineda	Electric	Electric Generation	Brandy Branch - Units B52, B53 Selective Catalytic Reduction Catalyst - Replacement	\$55,000	\$882,000	\$0	\$0	\$0
060-174	G Gilchrist	Electric	Electric Generation	Northside Generating Station - Unit N03 Condenser Waterbox Liner Replacement	\$14,000	\$1,145,000	\$0	\$0	\$0
068-31	J Pineda	Electric	Electric Generation	Units B52, B53 Advanced Gas Path Upgrade - Spare Parts	\$0	\$20,000,000	\$0	\$0	\$0
084-12	S McInall	Electric	Electric Generation	Compression Upgrade to Baldwin-Brandy Branch	\$0	\$1,000,000	\$6,000,000	\$0	\$0
086-03	S McInall	Electric	Electric Generation	Potential Gas Line Capacity Upgrades	\$0	\$0	\$1,500,000	\$3,000,000	\$0
075-01H1	J Pineda	Electric	Electric Generation	Greenland Combustion turbine Unit 1 - Hot Gas Path Inspection	\$0	\$0	\$0	\$300,000	\$5,845,000
064-02H6	J Pineda	Electric	Electric Generation	Brandy Branch Combustion Turbine 2 - Hot Gas Path Inspection	\$0	\$0	\$0	\$250,000	\$5,745,000
064-03H6	J Pineda	Electric	Electric Generation	Brandy Branch Combustion Turbine 3 - Hot Gas Path Inspection	\$0	\$0	\$0	\$250,000	\$5,745,000
207-16	J McCarthy	Electric	Electric Other Capital Projects	General Administration Office Building	\$28,604,000	\$20,477,000	\$0	\$0	\$0
351-E	J Nelson	Electric	Electric Other Capital Projects	Capital Administrative Overhead- Electric	\$9,750,000	\$9,750,000	\$9,750,000	\$9,750,000	\$9,750,000
007-98E	C Edgar	Electric	Electric Other Capital Projects	TS - Projects - Electric	\$7,490,000	\$6,870,000	\$4,960,000	\$7,120,000	\$10,200,000
211-E	A McElroy	Electric	Electric Other Capital Projects	Fleet - Replacement - Electric	\$7,295,000	\$7,949,000	\$7,430,000	\$7,954,000	\$7,431,000

Forecast CF

Index No	Project Owner	Service	City Rollup	Project Description	FY19 Total	FY20 Total	FY21 Total	FY22 Total	FY23 Total
207-21E	J McCarthy	Electric	Electric Other Capital Projects	New Operations Center (South)	\$6,500,000	\$15,000,000	\$0	\$0	\$0
055-141B	G Acs	Electric	Electric Other Capital Projects	Streetlight Improvements - Phase 2	\$5,500,000	\$0	\$0	\$0	\$0
207-17	J McCarthy	Electric	Electric Other Capital Projects	Westside Service Center - Administrative and Warehouse Space	\$2,826,500	\$0	\$0	\$0	\$0
207-20E	J McCarthy	Electric	Electric Other Capital Projects	Commonwealth Service Center - Interior and Roof Upgrades	\$2,000,000	\$3,000,000	\$0	\$0	\$0
008-66E	C Edgar	Electric	Electric Other Capital Projects	TS - Fiber Optic Cstv Replacement	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000
195-E	B Edwards	Electric	Electric Other Capital Projects	Facilities Security - Electric	\$620,000	\$620,000	\$620,000	\$620,000	\$620,000
008-55E	C Edgar	Electric	Electric Other Capital Projects	TS - Network Equipment Repair and Replace	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
008-56E	C Edgar	Electric	Electric Other Capital Projects	TS - Server and Related Major Equipment - Repair and Replace	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
008-117E	C Edgar	Electric	Electric Other Capital Projects	TS - PC and Laptop Refresh (4-yr cycle)	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
008-138E	C Edgar	Electric	Electric Other Capital Projects	TS - Server Towers	\$500,000	\$500,000	\$300,000	\$300,000	\$300,000
250-E	J McCarthy	Electric	Electric Other Capital Projects	Facilities Roof Replacement - Electric	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000
248-E	J McCarthy	Electric	Electric Other Capital Projects	Facilities Heating, Ventilation, and Air - Electric	\$430,000	\$430,000	\$430,000	\$430,000	\$430,000
207-E	J McCarthy	Electric	Electric Other Capital Projects	Facilities Improvements - Building Upgrades - Electric	\$425,000	\$425,000	\$200,000	\$200,000	\$200,000
008-57E	C Edgar	Electric	Electric Other Capital Projects	TS - Virtualization Infrastructure (Includes Vmware and Citrix) - Electric	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
211-02E	A McElroy	Electric	Electric Other Capital Projects	Fleet - Expansion - Electric	\$250,833	\$1,000	\$1,000	\$1,000	\$1,000
209-E	J McCarthy	Electric	Electric Other Capital Projects	Facilities - Paving and Site Improvements - Electric	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
789-13D	G Baker	Electric	Electric Other Capital Projects	Energy Management System - Base Upgrade Project	\$225,000	\$130,000	\$130,000	\$130,000	\$130,000
207-E2	J McCarthy	Electric	Electric Other Capital Projects	Facilities Improvements - Lighting - Electric	\$200,000	\$200,000	\$100,000	\$100,000	\$100,000
207-E1	J McCarthy	Electric	Electric Other Capital Projects	Facilities Improvements - Elevators - Electric	\$190,000	\$50,000	\$50,000	\$50,000	\$50,000
905-E	J McCarthy	Electric	Electric Other Capital Projects	Facilities Generators - Electric	\$175,000	\$1,000	\$1,000	\$1,000	\$175,000
207-13E	J McCarthy	Electric	Electric Other Capital Projects	Westside Service Center - Paving Upgrades	\$135,000	\$0	\$0	\$0	\$0
208-SS10	B Edwards	Electric	Electric Other Capital Projects	Security - Fencing - Electric	\$130,000	\$130,000	\$130,000	\$130,000	\$130,000
008-101E	C Edgar	Electric	Electric Other Capital Projects	TS - JEA.COM APPS - Electric	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
207-04E	J McCarthy	Electric	Electric Other Capital Projects	Facilities Improvements, Plumbing and Fire System Upgrades - Electric	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
207-27E	J McCarthy	Electric	Electric Other Capital Projects	Northside Generating Station - Training Center	\$85,000	\$783,000	\$1,232,000	\$0	\$0
260-E	K Holbrooks	Electric	Electric Other Capital Projects	Laboratory Equipment Upgrades - Electric	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
008-77E	C Edgar	Electric	Electric Other Capital Projects	TS - First Coast Radio System - Upgrades and Radios	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
012-05E	J McCarthy	Electric	Electric Other Capital Projects	Utility Locate Group - Capital Equipment - Electric	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
008-80E	C Edgar	Electric	Electric Other Capital Projects	TS - Network Meter Reading - New MCC Additions And Takeout Points - Smart Grid	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
055-141C	G Acs	Electric	Electric Other Capital Projects	Streetlight Improvements - Phase 3	\$0	\$5,500,000	\$5,900,000	\$0	\$0
207-12E	J McCarthy	Electric	Electric Other Capital Projects	Commonwealth Service Center Drainage and Parking Issues	\$0	\$462,000	\$0	\$0	\$0
008-197E	C Edgar	Electric	Electric Other Capital Projects	TS - Customer Alerts and Notifications	\$0	\$50,000	\$2,000,000	\$0	\$0
008-139E	C Edgar	Electric	Electric Other Capital Projects	TS - FS CAD Upgrade	\$0	\$0	\$2,500,000	\$0	\$0
207-18	J McCarthy	Electric	Electric Other Capital Projects	Southside Service Center - HVAC Safety Restroom and Door Upgrades	\$0	\$0	\$2,000,000	\$0	\$0
008-30E1	C Edgar	Electric	Electric Other Capital Projects	TS - Technology Security Repair and Replace	\$0	\$0	\$0	\$50,000	\$50,000
706-04	M Rivera-Clapp	Electric	Electric Transmission & Distribution	Electric Meters - 2-Way Meter Conversion	\$20,000,000	\$20,000,000	\$0	\$0	\$0
767-01	J Mathews	Electric	Electric Transmission & Distribution	Electric Distribution Maintenance Capital Upgrades	\$12,500,000	\$12,500,000	\$13,000,000	\$13,500,000	\$14,000,000
789-126	J Coarsey	Electric	Electric Transmission & Distribution	Solar Farm Interconnects	\$10,000,000	\$10,000,000	\$0	\$0	\$0
012-07	J Coarsey	Electric	Electric Transmission & Distribution	Sysstem Average Interruption Duration Index (SAIDI) Improvement Plan	\$9,776,000	\$9,490,000	\$7,870,000	\$0	\$0
788-56	G Acs	Electric	Electric Transmission & Distribution	Dinsmore 230 - 26 kV Substation	\$8,826,100	\$2,869,000	\$0	\$0	\$0
044-E	G Acs	Electric	Electric Transmission & Distribution	New Electric Service Additions	\$8,600,000	\$8,600,000	\$9,100,000	\$9,800,000	\$10,500,000
789-89	G Acs	Electric	Electric Transmission & Distribution	GEC to Bartram 230 kV Circuit 909 Addition	\$7,888,000	\$1,480,000	\$0	\$0	\$0
788-02	G Acs	Electric	Electric Transmission & Distribution	Electric Development Driven Projects	\$7,000,000	\$6,500,000	\$6,500,000	\$6,500,000	\$6,500,000
788-118	J Coarsey	Electric	Electric Transmission & Distribution	Eagle 138 - 13.8 kV Substation	\$4,277,000	\$7,240,000	\$0	\$0	\$0
788-88D	R Eridon	Electric	Electric Transmission & Distribution	Substation Repair and Replace Project - Transformer Replacements	\$3,800,000	\$1,400,000	\$1,400,000	\$1,400,000	\$1,400,000
055-138	G Acs	Electric	Electric Transmission & Distribution	CEMI-5 Electric Distribution Betterment	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
788-115	G Acs	Electric	Electric Transmission & Distribution	Bartram 230 kV Bay and Breaker Addition for Circuit 909	\$2,836,000	\$0	\$0	\$0	\$0
045-01	G Acs	Electric	Electric Transmission & Distribution	Joint Participation Electric Relocation Projects	\$2,800,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000
055-71	G Acs	Electric	Electric Transmission & Distribution	4KV Conversion - Fairfax and 21st and Hubbard	\$2,107,000	\$319,130	\$0	\$0	\$0
813-01	J Mathews	Electric	Electric Transmission & Distribution	General Underground Network and Commercial Repair and Replace and Upgrades	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000
788-35	J Coarsey	Electric	Electric Transmission & Distribution	Nocatee 230 - 26 kV Substation	\$1,860,000	\$6,020,000	\$3,870,000	\$0	\$0
789-95	G Baker	Electric	Electric Transmission & Distribution	500 kV Transmission Line Upgrades	\$1,800,000	\$1,800,000	\$0	\$0	\$0
055-177	G Acs	Electric	Electric Transmission & Distribution	Church St Feeders 181-186 13kV Reconductor from Substation to Riverside Ave	\$1,774,000	\$1,774,000	\$887,000	\$0	\$0
055-102	J Mathews	Electric	Electric Transmission & Distribution	Pole Replacement Program	\$1,750,000	\$1,750,000	\$2,000,000	\$2,000,000	\$2,250,000
706-02	M Rivera-Clapp	Electric	Electric Transmission & Distribution	Electric Meters - Growth	\$1,649,000	\$1,679,000	\$1,740,000	\$1,709,000	\$1,709,000
012-01	J Coarsey	Electric	Electric Transmission & Distribution	Electric Distribution System Improvements	\$1,624,000	\$1,637,000	\$1,850,000	\$1,684,000	\$1,664,000
788-119	R Eridon	Electric	Electric Transmission & Distribution	Kennedy Substation Control Cable and Protection System Replacement	\$1,475,000	\$720,000	\$0	\$0	\$0
788-32	G Acs	Electric	Electric Transmission & Distribution	Greenland Energy Center 230 kV Bay and Breaker Addition for Circuit 909	\$1,402,000	\$0	\$0	\$0	\$0
789-125	G Acs	Electric	Electric Transmission & Distribution	230kV Circuit 915 Partial Rebuild	\$1,142,000	\$0	\$0	\$0	\$0
788-118P	J Coarsey	Electric	Electric Transmission & Distribution	Eagle 138 - 13.8 kV Substation - Protection and Controls	\$1,086,000	\$71,000	\$0	\$0	\$0

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012-06	J Coarsey	Electric	Electric Transmission & Distribution	Automatic Recloser Deployment	\$1,040,000	\$235,000	\$235,000	\$235,000	\$235,000
055-102A	J Mathews	Electric	Electric Transmission & Distribution	Distribution System - Pole Removal	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
789-96	G Acs	Electric	Electric Transmission & Distribution	Transmission Lines Protection and Control Updates	\$800,000	\$800,000	\$0	\$0	\$0
789-71	R Eridon	Electric	Electric Transmission & Distribution	230 KV - 138KV 69 kV Pole Refurbishment	\$800,000	\$300,000	\$300,000	\$300,000	\$300,000
055-173	G Acs	Electric	Electric Transmission & Distribution	26KV Feeder Circuit Breaker Replacement	\$754,000	\$754,000	\$754,000	\$754,000	\$754,000
055-168	G Acs	Electric	Electric Transmission & Distribution	Ritter Park 429 Reconductor	\$725,000	\$71,000	\$0	\$0	\$0
789-01	R Eridon	Electric	Electric Transmission & Distribution	General Substation Improvements	\$700,000	\$700,000	\$700,000	\$700,000	\$700,000
055-175	G Baker	Electric	Electric Transmission & Distribution	Energy Management System - Distribution Management System Integration	\$700,000	\$0	\$0	\$0	\$0
789-124	R Eridon	Electric	Electric Transmission & Distribution	Transmission Capacitor Bank Controls Replacement	\$610,000	\$468,000	\$0	\$0	\$0
789-72	R Eridon	Electric	Electric Transmission & Distribution	230KV 138KV 69 kV Insulator Refurbishment	\$600,000	\$500,000	\$500,000	\$500,000	\$500,000
789-114	G Acs	Electric	Electric Transmission & Distribution	Center Park Substation Protection Improvements	\$580,000	\$0	\$0	\$0	\$0
789-56A	G Acs	Electric	Electric Transmission & Distribution	Dinsmore 230 - 26 kV Substation - Protection and Controls	\$568,000	\$0	\$0	\$0	\$0
055-49	G Acs	Electric	Electric Transmission & Distribution	26KV Reconductor Circuit 417 - 418 - Woodley Rd from New Kings Rd to Old Kings Rd	\$504,000	\$242,618	\$0	\$0	\$0
052-01	G Acs	Electric	Electric Transmission & Distribution	Underground Cable Replacement Program - Existing Developments	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
055-47	G Acs	Electric	Electric Transmission & Distribution	Dinsmore Distribution Feeders	\$474,500	\$228,000	\$0	\$0	\$0
789-121	G Acs	Electric	Electric Transmission & Distribution	Pipe-Type Cable Pothead Replacements - Kennedy Circuit 682 and Hunter Rd Circuit 688	\$430,000	\$0	\$0	\$0	\$0
789-81C	G Acs	Electric	Electric Transmission & Distribution	Greenland Energy Center - 230 kV Circuit 909 Interconnect	\$400,000	\$9,000	\$0	\$0	\$0
789-115	G Acs	Electric	Electric Transmission & Distribution	Bartram 230 kV Circuit 909 Interconnect	\$396,000	\$0	\$0	\$0	\$0
055-174	G Acs	Electric	Electric Transmission & Distribution	Bartram 298: Feeder Extension in Transmission Right of Way from Substation to Bartram Park Blvd	\$395,000	\$0	\$0	\$0	\$0
789-35P	J Coarsey	Electric	Electric Transmission & Distribution	Nocatee 230 - 26 kV Substation - Protection and Controls	\$385,000	\$376,000	\$289,000	\$0	\$0
055-36	J Coarsey	Electric	Electric Transmission & Distribution	Nocatee Substation Distribution Feeders	\$370,000	\$580,000	\$300,000	\$0	\$0
789-01	G Acs	Electric	Electric Transmission & Distribution	General Transmission Improvements	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
055-26	G Acs	Electric	Electric Transmission & Distribution	General Distribution Improvements	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
708-01	M Rivera-Clapp	Electric	Electric Transmission & Distribution	Electric Meters - Replacement	\$300,000	\$225,000	\$300,000	\$300,000	\$300,000
045-94E	G Acs	Electric	Electric Transmission & Distribution	(Reimbursable) Joint Project - Twin Creeks - SR210 - Electric	\$275,000	\$0	\$0	\$0	\$0
789-19	G Acs	Electric	Electric Transmission & Distribution	Dinsmore 230 kV Circuit 937 Interconnect	\$240,000	\$206,000	\$0	\$0	\$0
789-32A	G Acs	Electric	Electric Transmission & Distribution	Greenland Energy Center 230 kV Bay and Breaker Addition for Circuit 909 - Protection and Controls	\$219,000	\$0	\$0	\$0	\$0
055-150	J Coarsey	Electric	Electric Transmission & Distribution	13kV Electric Distribution Network Improvements Placeholder	\$200,000	\$150,000	\$1,000,000	\$1,000,000	\$764,000
287-E	J Mathews	Electric	Electric Transmission & Distribution	Capital Tools and Equipment - Electric	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000
789-13E	G Baker	Electric	Electric Transmission & Distribution	Energy Management System - EMS - Remote Terminal Units Upgrade Project	\$160,000	\$50,000	\$50,000	\$50,000	\$50,000
789-85	R Eridon	Electric	Electric Transmission & Distribution	General Protection System Improvements Transmission	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
789-29	R Eridon	Electric	Electric Transmission & Distribution	General Transmission Improvements	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
287-E1	R Eridon	Electric	Electric Transmission & Distribution	Capital Tools and Equipment - Electric 1	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000
789-122	J Coarsey	Electric	Electric Transmission & Distribution	Eagle 138kV Circuit 847 Interconnect	\$80,000	\$408,000	\$0	\$0	\$0
789-115A	G Acs	Electric	Electric Transmission & Distribution	Bartram 230 kV Bay and Breaker Addition for Circuit 909 - Protection and Controls	\$80,000	\$0	\$0	\$0	\$0
057-09	G Baker	Electric	Electric Transmission & Distribution	Electric Customer Service Response Tools and Equipment	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000
789-81A	J Coarsey	Electric	Electric Transmission & Distribution	Nocatee 230 kV Circuit 909 Interconnect	\$28,000	\$67,000	\$105,000	\$0	\$0
789-114	J Coarsey	Electric	Electric Transmission & Distribution	Nocatee 230 kV Circuit 917 Interconnect	\$28,000	\$67,000	\$105,000	\$0	\$0
055-174P	G Acs	Electric	Electric Transmission & Distribution	Bartram 298: Feeder Extension in Transmission Right of Way from Substation to Bartram Park Bv - Protection and C	\$10,000	\$0	\$0	\$0	\$0
789-88	R Eridon	Electric	Electric Transmission & Distribution	Substation Repair and Replace Projects - Future	\$0	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
789-97	R Eridon	Electric	Electric Transmission & Distribution	Transmission Repair and Replace Projects - Future	\$0	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000
789-125	J Coarsey	Electric	Electric Transmission & Distribution	230kV Breaker Replacement	\$0	\$1,600,000	\$1,600,000	\$1,600,000	\$0
789-122	J Coarsey	Electric	Electric Transmission & Distribution	Park and King 4kV Substation Rebuild	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$0
789-122P	J Coarsey	Electric	Electric Transmission & Distribution	Park and King 4kV Substation Rebuild - Protection and Controls	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$0
055-01	J Coarsey	Electric	Electric Transmission & Distribution	4kV Rehabilitation - Distribution Projects	\$0	\$500,000	\$500,000	\$500,000	\$500,000
789-125P	J Coarsey	Electric	Electric Transmission & Distribution	230kV Breaker Replacement - Protection and Controls	\$0	\$320,000	\$320,000	\$160,000	\$160,000
055-180	J Coarsey	Electric	Electric Transmission & Distribution	Park and King 4kV Distribution Feeder Getaway Rebuild	\$0	\$50,000	\$100,000	\$50,000	\$0
789-121	J Coarsey	Electric	Electric Transmission & Distribution	St Johns 4kV Substation Rebuild	\$0	\$0	\$1,000,000	\$1,000,000	\$1,000,000
789-121P	J Coarsey	Electric	Electric Transmission & Distribution	St Johns 4kV Substation Rebuild - Protection and Controls	\$0	\$0	\$100,000	\$100,000	\$200,000
055-178	J Coarsey	Electric	Electric Transmission & Distribution	St Johns 4kV Distribution Feeder Getaway Rebuild	\$0	\$0	\$50,000	\$100,000	\$50,000
789-120	J Coarsey	Electric	Electric Transmission & Distribution	Mayo Clinic 230 - 26kV Substation	\$0	\$0	\$0	\$1,000,000	\$6,000,000
789-120P	J Coarsey	Electric	Electric Transmission & Distribution	Mayo Clinic 230 - 26kV Substation - Protection and Controls	\$0	\$0	\$0	\$150,000	\$700,000
055-178	J Coarsey	Electric	Electric Transmission & Distribution	Mayo Clinic Distribution Feeders	\$0	\$0	\$0	\$50,000	\$200,000
789-127	J Coarsey	Electric	Electric Transmission & Distribution	Mayo Clinic 230/26kV Substation Interconnects	\$0	\$0	\$0	\$12,000	\$288,000
180-65	D Calhoun	Water	Sewer	Resiliency - Pump Stations, Plants, Electrical Reliability	\$18,000,000	\$19,800,000	\$19,800,000	\$19,800,000	\$15,000,000
180-21B	R Marshall	Water	Sewer	Bradley Road Pump Station Improvements	\$8,834,000	\$9,000	\$0	\$0	\$0
175-33S	R Marshall	Water	Sewer	West Grid - Lenox to Timuquana - Force Main and Pump Station Improvements	\$7,904,874	\$100,000	\$0	\$0	\$0
417-10	R Marshall	Water	Sewer	Gate Pkwy - Glen Keran to T-Line - Transmission - New	\$5,994,000	\$358,000	\$0	\$0	\$0
711-26	R Marshall	Water	Sewer	Buckman Biosolids Conversion - Process Facility	\$5,288,000	\$10,616,000	\$13,224,000	\$0	\$0
180-24	R Marshall	Water	Sewer	Argyle Forest Booster Station and Related Stations Upgrades	\$4,931,000	\$100,000	\$0	\$0	\$0

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103-01	R Marshall	Water	Sewer	Blacks Ford Water Reclamation Facility - Expansion	\$4,000,000	\$0	\$0	\$0	\$0
711-34	R Marshall	Water	Sewer	Buckman Disinfection System Replacement	\$3,638,000	\$2,600,000	\$0	\$0	\$0
180-23	R Marshall	Water	Sewer	4511 Spring Park Rd Lift Station	\$3,330,000	\$2,000,000	\$0	\$0	\$0
175-39S	R Marshall	Water	Sewer	Large Diameter Pipe Program - Walnut St Trunkline Replacement: 32nd St Pump Station to 16th St E	\$3,220,000	\$4,143,000	\$0	\$0	\$0
870-01	D Calhoun	Water	Sewer	Wastewater Treatment Facilities - Capital Equipment Replacement	\$3,140,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000
175-S	M Jones	Water	Sewer	Sewer Collection System Repair and Replacements	\$2,800,000	\$2,800,000	\$2,800,000	\$2,800,000	\$2,800,000
177-01	D Calhoun	Water	Sewer	Pumping Stations - Capital Equipment Replacement	\$2,600,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000
100-46	R Marshall	Water	Sewer	T - Line - JTB to Town Center Pkwy - Transmission - New - Force Main	\$2,542,000	\$0	\$0	\$0	\$0
268-W3	R Marshall	Water	Sewer	Greenland Wastewater Treatment Plant	\$2,521,667	\$20,000,000	\$30,000,000	\$30,000,000	\$0
100-58	T Mackey	Water	Sewer	Greenland - GEC to US-1 - Transmission - Force Main	\$2,407,000	\$0	\$0	\$0	\$0
169-S1	M Jones	Water	Sewer	Sewer Collection System - Trenchless Repair and Replace	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
417-82	R Marshall	Water	Sewer	Nassau Reclaim Water Main - Radio Av to Harts Rd - Transmission - Reclaim	\$1,968,400	\$0	\$0	\$0	\$0
179-01	D Calhoun	Water	Sewer	Pumping Stations - Class I/II Station Rehabilitation	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000
172-01S	R Marshall	Water	Sewer	Large Diameter Pipe Program - Gravity Sewer Replacement	\$1,800,167	\$1,400,000	\$1,800,000	\$1,600,000	\$2,000,000
711-46	R Marshall	Water	Sewer	Buckman Water Reclamation Facility - Blower System Improvements	\$1,800,000	\$1,500,000	\$0	\$0	\$0
180-43	R Marshall	Water	Sewer	District 2 - Robena Rd Booster Wastewater Pump Station	\$1,698,000	\$350,000	\$0	\$0	\$0
187-R	T Mackey	Water	Sewer	Development Driven Projects - Reclaim	\$1,688,000	\$400,000	\$400,000	\$400,000	\$400,000
870-08	R Marshall	Water	Sewer	Nassau Regional Water Reclamation Facility - Expansion	\$1,653,000	\$10,616,000	\$13,211,000	\$12,211,000	\$4,600,000
180-40	R Marshall	Water	Sewer	District 2 - Pulaski Rd Booster Wastewater Pump Station	\$1,617,000	\$750,000	\$0	\$0	\$0
100-82	R Marshall	Water	Sewer	Greenland - Burnt Mill Pump Station to Greenland Energy Center - Force Main	\$1,530,000	\$3,244,000	\$5,869,000	\$3,800,000	\$0
135-09	R Marshall	Water	Sewer	Arlington East Water Reclamation Facility - Secondary Clarifier Addition	\$1,518,667	\$0	\$0	\$0	\$0
172-02S	R Marshall	Water	Sewer	Large Diameter CIPP - Program	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000
172-03S	R Marshall	Water	Sewer	Air Release Valve Replacement - Program	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000
711-44	R Marshall	Water	Sewer	Buckman Water Reclamation Facility - Aeration Basin Air Header and Diffuser Replacement	\$1,500,000	\$1,500,000	\$1,500,000	\$1,470,000	\$0
167-S	T Mackey	Water	Sewer	Development Driven Projects - Sewer	\$1,360,000	\$200,000	\$200,000	\$200,000	\$200,000
827-02	D Calhoun	Water	Sewer	Supervisory Control and Data Acquisition (SCADA) Remote Terminal Units and Control Panel Upgrades	\$1,200,000	\$1,200,000	\$1,200,000	\$1,500,000	\$1,500,000
100-54A	R Marshall	Water	Sewer	District 2 - T-Line to Busch Dr - Transmission - New - Force Main	\$1,143,000	\$0	\$0	\$0	\$0
175-41S	R Marshall	Water	Sewer	Large Diameter Pipe Program - Bemita St Force Main Replacement: Macy Ave to Monterey Wastewater Treatment F	\$1,112,000	\$0	\$0	\$0	\$0
711-01	D Calhoun	Water	Sewer	Biosolids Process Renewal and Replacement	\$1,100,000	\$800,000	\$800,000	\$740,000	\$740,000
180-50	R Marshall	Water	Sewer	Southwest - 4881 Timuquana Rd - Class III/IV	\$1,083,000	\$1,101,000	\$0	\$0	\$0
175-38S	R Marshall	Water	Sewer	Large Diameter Pipe Program - Southwest Service Area Infiltration and Inflow Analysis and Remediation	\$1,000,000	\$2,000,000	\$1,000,000	\$0	\$0
172-04S	R Marshall	Water	Sewer	Sewer Pipeline Cross/Northside Generating Station Resiliency - Program	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
135-14	D Calhoun	Water	Sewer	Arlington East Water Reclamation Facility Upgrades - Aeration Basin and Blowers	\$956,000	\$3,642,000	\$5,897,000	\$3,493,000	\$0
417-36	T Mackey	Water	Sewer	RG Skinner - 9B to Parcels 10A - 11 - Reclaim	\$914,000	\$0	\$0	\$0	\$0
417-85	R Marshall	Water	Sewer	Nocatee South RW Storage Tank and Booster PS - Reclaim	\$909,000	\$3,969,000	\$100,000	\$0	\$0
417-49	R Marshall	Water	Sewer	Tredinick Pkwy - Milcoe Rd to Mill Creek Rd - Transmission - Reclaim	\$883,000	\$0	\$0	\$0	\$0
180-26	R Marshall	Water	Sewer	District 2 - 11308 Harts Rd - Class III/IV	\$871,000	\$520,000	\$0	\$0	\$0
417-61	R Marshall	Water	Sewer	Nassau - Radio Av - Reclaim Water Storage Tank and Booster Pump Station	\$855,000	\$2,326,000	\$0	\$0	\$0
180-47	R Marshall	Water	Sewer	Southwest - 5104 118th St - Class III/IV	\$851,000	\$5,447,000	\$0	\$0	\$0
417-35	T Mackey	Water	Sewer	RG Skinner - 9B to T-Line - Reclaim	\$826,000	\$0	\$0	\$0	\$0
150-11	R Marshall	Water	Sewer	Southwest Wastewater Treatment Plant Expansion	\$800,000	\$3,000,000	\$5,000,000	\$19,781,000	\$23,300,000
100-40	R Marshall	Water	Sewer	5th St W - Imeson Rd to Melson Ave - Transmission - New - Force Main	\$791,000	\$3,380,000	\$2,019,000	\$0	\$0
175-27S	R Marshall	Water	Sewer	Large Diameter Pipe Program - Ducile Iron Force Main Replacement	\$780,000	\$1,020,000	\$500,000	\$3,000,000	\$3,000,000
180-46	R Marshall	Water	Sewer	Buckman - 5307 Buffalo Ave - Class III/IV	\$775,000	\$1,618,000	\$1,000,000	\$0	\$0
171-02S	M Jones	Water	Sewer	Main Extensions and Taps - Sewer	\$725,417	\$725,000	\$725,000	\$725,000	\$725,000
175-42S	R Marshall	Water	Sewer	Large Diameter Pipe Program - South Shores Sub-Aqueous Force Main Rehabilitation	\$700,000	\$4,000,000	\$4,000,000	\$0	\$0
128-06	D Calhoun	Water	Sewer	Ponce De Leon Wastewater Treatment Facility - Package Treatment Plant	\$677,000	\$0	\$0	\$0	\$0
180-08	R Marshall	Water	Sewer	Southwest Water Reclamation Facility - Screening Conveyance and Grt Removal System Replacement	\$658,000	\$0	\$0	\$0	\$0
417-64	R Marshall	Water	Sewer	Twin Creeks Reclaim Water Storage Tank and Booster Pump Station - Reclaim	\$643,000	\$2,588,000	\$0	\$0	\$0
711-45	R Marshall	Water	Sewer	Buckman Water Reclamation Facility - Secondary MCC 19A and 19B Replacement	\$613,000	\$0	\$0	\$0	\$0
180-45	R Marshall	Water	Sewer	Southwest - 6217 Wilson Bv - Class III/IV	\$599,800	\$4,545,000	\$0	\$0	\$0
135-12	R Marshall	Water	Sewer	Large Diameter Pipe Program - Arlington East Water Reclamation Facility - Parallel Sludge Transfer Line	\$599,667	\$1,200,000	\$1,200,000	\$0	\$0
711-43	D Calhoun	Water	Sewer	Buckman Biosolids Conveyor System Replacement	\$565,000	\$0	\$0	\$0	\$0
731-04	R Marshall	Water	Sewer	Julington Creek Wastewater Treatment Facility - Influent Structure Rehabilitation	\$554,000	\$0	\$0	\$0	\$0
417-46	R Marshall	Water	Sewer	CR210 - South Hampton to Ashford Mills - Transmission - Reclaim	\$551,000	\$50,000	\$0	\$0	\$0
148-05	D Calhoun	Water	Sewer	Ponte Vedra Water Reclamation Facility - Filter Addition	\$536,000	\$322,000	\$0	\$0	\$0
182-58S	R Marshall	Water	Sewer	Joint Project - COJ - Lower Eastside Drainage Improvements (First St - APR Blvd to Van Buren) - Sewer	\$504,000	\$177,000	\$0	\$0	\$0
417-79	R Marshall	Water	Sewer	Bartram Repump Station Potable Water Storage Tank	\$497,000	\$0	\$0	\$0	\$0
138-07	D Calhoun	Water	Sewer	Mandarin Water Reclamation Facility - Expansion Joint Replacement	\$491,000	\$1,303,000	\$0	\$0	\$0
103-03	D Calhoun	Water	Sewer	Blacks Ford and Ponte Vedra Temporary Treatment Plant	\$481,000	\$1,025,000	\$0	\$0	\$0

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180-29	R Marshall	Water	Sewer	7703 Blanding Bv - Class III/IV	\$477,000	\$2,136,000	\$0	\$0	\$0
417-76	R Marshall	Water	Sewer	Arlington East Water Reclamation Facility Upgrades - Odor Control	\$470,000	\$4,386,000	\$796,000	\$0	\$0
870-12	D Calhoun	Water	Sewer	Nassau Regional Water Reclamation Facility - Tank 2 Membrane Replacement	\$450,000	\$0	\$0	\$0	\$0
180-67	R Marshall	Water	Sewer	Large Diameter Pipe Program - CR210 Booster Pump Station Pipeline Cleaning Facilities and Force Main Cleaning	\$450,000	\$0	\$0	\$0	\$0
167-P	T Mackey	Water	Sewer	Development Driven Projects - Pump Stations	\$435,000	\$700,000	\$700,000	\$700,000	\$700,000
175-44	M Jones	Water	Sewer	Collins Rd, Whispering Pines Dr to Blanding Blvd - Force Main Replacement	\$435,000	\$0	\$0	\$0	\$0
182-S	R Marshall	Water	Sewer	Joint Participation Projects - Sewer	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
731-06	D Calhoun	Water	Sewer	Julington Creek Wastewater Treatment Facility - Electrical Grounding	\$391,000	\$0	\$0	\$0	\$0
135-11	R Marshall	Water	Sewer	Arlington East Water Reclamation Facility Upgrades - Influent Structure	\$375,000	\$3,884,000	\$348,000	\$0	\$0
129-15	R Marshall	Water	Sewer	District II Water Reclamation Facility Primary Clarifier No. 2 and 3 Rehabilitation	\$371,000	\$3,285,000	\$320,000	\$0	\$0
417-50	R Marshall	Water	Sewer	Baymeadows Rd - Point Meadows Rd to Old Still - Transmission - Reclaim	\$355,000	\$0	\$0	\$0	\$0
129-17	D Calhoun	Water	Sewer	District 2 Water Reclamation Facility - Hypochlorite Feed System Replacement	\$348,000	\$432,000	\$0	\$0	\$0
417-80	R Marshall	Water	Sewer	Gate Parkway to Burnt Mill Rd - Transmission - Reclaim	\$347,000	\$1,527,000	\$0	\$0	\$0
100-65	R Marshall	Water	Sewer	Large Diameter Pipe Program - McMillan and Kinlock Pump Stations Force Mains Upgrade	\$337,000	\$0	\$0	\$0	\$0
730-12	R Marshall	Water	Sewer	US 1 - Greenland Water Reclamation Facility to CR 210 - Transmission	\$300,000	\$3,480,000	\$9,690,000	\$4,129,000	\$0
180-59	T Mackey	Water	Sewer	Monterey - 3254 Townsend Rd - Class III/IV - Pump Upgrade	\$282,000	\$158,000	\$727,000	\$1,357,000	\$1,357,000
148-04	R Marshall	Water	Sewer	Ponte Vedra Water Reclamation Facility - Access Platform Addition and Handrail Replacement	\$278,000	\$0	\$0	\$0	\$0
180-60	T Mackey	Water	Sewer	Monterey - 5838 Pompano - Class III/IV - Pump Upgrade	\$278,000	\$161,000	\$1,056,000	\$1,574,000	\$0
129-16	D Calhoun	Water	Sewer	District 2 Water Reclamation Facility - Blowers and UV Emergency Power	\$266,000	\$2,472,000	\$0	\$0	\$0
166-S	T Mackey	Water	Sewer	Grid - Cost Participation - New - Force Main	\$250,000	\$250,000	\$500,000	\$500,000	\$500,000
168-R	T Mackey	Water	Sewer	Grid - Cost Participation - New - Reclaim	\$250,000	\$250,000	\$500,000	\$500,000	\$500,000
419-01	D Calhoun	Water	Sewer	Wastewater Odor Control - All Plants and Pump Stations	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
180-55	T Mackey	Water	Sewer	Nassau - Radio Ave - Class III/IV - New Pumpstation	\$208,000	\$113,000	\$962,000	\$1,431,000	\$0
711-42	R Marshall	Water	Sewer	Buckman Biosolids Conversion - Operations/Maintenance/Warehouse and Pump Shop Facility	\$207,000	\$163,000	\$524,000	\$2,104,000	\$1,500,000
711-41	R Marshall	Water	Sewer	Buckman Biosolids Conversion - Gas Scrubber, Electric Generator, Load Transformer, and Circuit	\$199,000	\$2,409,000	\$255,000	\$0	\$0
182-99S	R Marshall	Water	Sewer	Joint Project - JTA - Alta Drive Roadway Improvements - Sewer	\$198,000	\$20,000	\$0	\$0	\$0
180-54	T Mackey	Water	Sewer	Mandarin - 6751 Bayleaf Dr - Class III/IV - Pump Upgrade	\$186,000	\$337,000	\$671,000	\$1,315,000	\$1,316,000
417-77	R Marshall	Water	Sewer	Arlington East Water Reclamation Facility - Replace Auto-Transfer Switch	\$184,000	\$0	\$0	\$0	\$0
182-99R	R Marshall	Water	Sewer	Joint Project - JTA - Alta Drive Roadway Improvements - Reclaim	\$180,000	\$20,000	\$0	\$0	\$0
180-53	T Mackey	Water	Sewer	Mandarin - 9247 Baymeadows Rd - Class III/IV - Pump Upgrade	\$172,000	\$142,000	\$275,000	\$542,000	\$542,000
180-57	T Mackey	Water	Sewer	Mandarin - 8331 Princeton Sq - Class III/IV - Pump Upgrade	\$166,000	\$401,000	\$791,000	\$1,551,000	\$1,551,000
827-01	D Calhoun	Water	Sewer	Supervisory Control and Data Acquisition (SCADA) Renewal and Replacement	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
150-14	R Marshall	Water	Sewer	Southwest Water Reclamation Facility - Upgrade Aeration Blowers	\$150,000	\$0	\$0	\$0	\$0
100-48	R Marshall	Water	Sewer	William Burgess Rd - SR200 to Harts Rd - Transmission - New - Force Main	\$104,000	\$0	\$0	\$0	\$0
180-18	D Calhoun	Water	Sewer	Diesel-driven Backup Pump Repair and Replace	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
995-03	D Calhoun	Water	Sewer	Waste Water Pumping Station Safety Improvements - Guard Rail Installation	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
175-40S	R Marshall	Water	Sewer	Large Diameter Pipe Program - Herschel St Pump Station Force Main Replacement: Herschel St to Challen Ave	\$80,000	\$0	\$0	\$0	\$0
170-06	M Jones	Water	Sewer	Air Relief Valves Repair and Replace	\$70,000	\$70,000	\$70,000	\$70,000	\$50,000
181-06	J Scheel	Water	Sewer	Reuse Facility - Capital Equipment Replacement	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
175-16S	M Jones	Water	Sewer	Manhole - Supervisory Control and Data Acquisition (SCADA) - Repair and Replace	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
417-25	J Scheel	Water	Sewer	Reuse Delivery Repair and Replace	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
100-48R	R Marshall	Water	Sewer	(Reimbursable) - William Burgess Rd - SR200 to Harts Rd - Transmission - New - Reclaim	\$50,000	\$0	\$0	\$0	\$0
417-38	R Marshall	Water	Sewer	(Reimbursable) - Monument Rd - Cancun Dr to Hidden Hills Ln - Transmission - New - Reclaim	\$50,000	\$0	\$0	\$0	\$0
182-64S	R Marshall	Water	Sewer	Joint Project - FDOT - SR 200 (A1A) I-95 to Still Quarters Rd - Section 1 - Sewer	\$38,750	\$3,000	\$0	\$0	\$0
100-44	R Marshall	Water	Sewer	District 2 - Main St to Pulaski Rd - Transmission - Force Main	\$38,000	\$0	\$0	\$0	\$0
182-76S	R Marshall	Water	Sewer	Joint Project - FDOT - SR 200 (A1A) Rubin to O'Neil Scott - Section 3 - Sewer	\$30,000	\$0	\$0	\$0	\$0
182-85R	R Marshall	Water	Sewer	Joint Project - FDOT - SR 9B - Duval - St Johns County Line to CR2209 - Reclaim	\$21,000	\$0	\$0	\$0	\$0
182-90S	R Marshall	Water	Sewer	Joint Project - JTA - Collins Rd - Sewer	\$8,000	\$0	\$0	\$0	\$0
180-46	R Marshall	Water	Sewer	District 2 - 10800 Key Haven Bv - Class III/IV	\$5,000	\$1,441,000	\$0	\$0	\$0
182-88S	R Marshall	Water	Sewer	Joint Project - FDOT - Pecan Park Rd - I-95 - Sewer	\$3,000	\$0	\$0	\$0	\$0
182-85S	R Marshall	Water	Sewer	Joint Project - FDOT - SR 9B - Duval - St Johns County Line to CR2209 - Sewer	\$2,000	\$0	\$0	\$0	\$0
182-87R	R Marshall	Water	Sewer	Joint Project - FDOT - SR 9A (I-295) - Managed Lanes - JTB - 9B Extension - Reclaim	\$1,000	\$0	\$0	\$0	\$0
129-12	D Calhoun	Water	Sewer	District 2 Effluent Outfall Land Acquisition	\$0	\$1,100,000	\$0	\$0	\$0
180-36	D Calhoun	Water	Sewer	1638 Talleyrand Av - Class III/IV	\$0	\$777,000	\$6,827,000	\$2,233,000	\$0
995-04	D Calhoun	Water	Sewer	Wastewater Treatment Plant Large Capital Improvements	\$0	\$500,000	\$1,050,000	\$2,980,000	\$18,845,000
100-25	T Mackey	Water	Sewer	T-Line - Park Ave to Pulaski Rd Master Pump Station - Easement Acquisitions	\$0	\$500,000	\$0	\$0	\$0
100-17	T Mackey	Water	Sewer	T-Line - Brandy Branch to Beaver St - Dist - New - Force Main	\$0	\$360,000	\$1,300,000	\$3,190,000	\$0
101-18B	T Mackey	Water	Sewer	District 2 - New Berlin Rd - Yellow Bluff Rd to Eastport Rd - New - Force Main	\$0	\$330,000	\$1,260,000	\$2,784,000	\$0
417-48	T Mackey	Water	Sewer	(Reimbursable) - RG Skinner - North Rd - Transmission - Reclaim	\$0	\$300,000	\$1,080,000	\$1,620,000	\$0
180-61	T Mackey	Water	Sewer	Monterey - 7732 Merrill Rd - Class III/IV - Pump Upgrade	\$0	\$250,000	\$750,000	\$0	\$0

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180-62	T Mackey	Water	Sewer	Monterey - 8043 Carlotta Rd - Class III/IV - Pump Upgrade	\$0	\$250,000	\$750,000	\$0	\$0
180-63	T Mackey	Water	Sewer	Mandarin - 4181 Levista Cr - Class III/IV - Pump Upgrade	\$0	\$250,000	\$750,000	\$0	\$0
180-64	T Mackey	Water	Sewer	Southwest - 1060 Ellis Rd - Class III/IV - Pump Upgrade	\$0	\$250,000	\$500,000	\$0	\$0
100-41	T Mackey	Water	Sewer	Old Middleburg Rd - Argyle Forest Blvd to Maynard Pl - Transmission - New - Force Main	\$0	\$250,000	\$350,000	\$1,712,000	\$1,000,000
417-75	T Mackey	Water	Sewer	T-Line - Amelia Concourse to Amelia National - Transmission - Reclaim	\$0	\$144,000	\$510,000	\$148,000	\$0
100-47	T Mackey	Water	Sewer	St Johns Bluff Rd - UNF to Bradley Master Pump Station - Transmission - Rehabilitate Parallel Force Main	\$0	\$100,000	\$300,000	\$1,000,000	\$2,570,000
100-52	T Mackey	Water	Sewer	Deerwood Pk - Burnt Mill to JTB - Transmission - New - Force Main	\$0	\$80,000	\$310,000	\$712,000	\$0
417-12	T Mackey	Water	Sewer	River/Town Water Treatment Plant - Reclaim - New Storage and Pumping System	\$0	\$50,000	\$400,000	\$1,000,000	\$2,500,000
100-53	T Mackey	Water	Sewer	Deercreek Club Rd - Southside Blvd to Waterton Lane - Distribution - New - Force Main	\$0	\$12,000	\$144,000	\$249,000	\$0
100-45	T Mackey	Water	Sewer	Old Middleburg Rd - Maynard Pl to Shindler Dr - New - Force Main	\$0	\$0	\$935,000	\$0	\$0
180-56	T Mackey	Water	Sewer	Mandarin - 106 Twin Creeks - Class III/IV - Pump Upgrade	\$0	\$0	\$500,000	\$0	\$0
180-58	T Mackey	Water	Sewer	Arlington East - 420 Tresca Rd - Class III/IV - Pump Upgrade	\$0	\$0	\$500,000	\$0	\$0
100-42	T Mackey	Water	Sewer	118th St - Kinkaid Rd to Ricker Rd - Transmission - New - Force Main	\$0	\$0	\$350,000	\$1,000,000	\$2,049,000
417-72	T Mackey	Water	Sewer	Veterans Pkwy - Longleaf Pine Pkwy to CR210 - Transmission	\$0	\$0	\$300,000	\$3,000,000	\$4,000,000
417-73	T Mackey	Water	Sewer	District 2 Water Treatment Facility - Rapid Infiltration Basin - Transmission and Pumping	\$0	\$0	\$300,000	\$3,000,000	\$4,000,000
417-54	T Mackey	Water	Sewer	CR210 - Twin Creeks to Russell Sampson Rd - Transmission - Reclaim	\$0	\$0	\$300,000	\$1,080,000	\$1,820,000
417-53	T Mackey	Water	Sewer	CR210 - Longleaf Pine Pkwy to Ashford Mills Rd - Transmission - Reclaim	\$0	\$0	\$250,000	\$2,050,000	\$2,700,000
417-74	T Mackey	Water	Sewer	Greenbriar Rd - Longleaf Pine Pkwy to Spring Haven Dr - Transmission - Reclaim	\$0	\$0	\$200,000	\$1,320,000	\$1,980,000
417-52	T Mackey	Water	Sewer	Russell Sampson Rd - Sewer, Johns Pkwy to CR210 - Transmission - Reclaim	\$0	\$0	\$200,000	\$920,000	\$1,888,000
100-59	T Mackey	Water	Sewer	Large Diameter Pipe Program - District 2 - Wateroodley to Key Haven - Transmission - Force Main	\$0	\$0	\$190,000	\$0	\$0
180-41	T Mackey	Water	Sewer	District 2 - 10340 Woodley Pump Station - Pump Modifications	\$0	\$0	\$100,000	\$0	\$0
180-52	T Mackey	Water	Sewer	District 2 - 14491 Duval Rd - Class III/IV - Pump Upgrade	\$0	\$0	\$0	\$500,000	\$0
417-81	T Mackey	Water	Sewer	SR200 - William Burgess Blvd to Police Lodge Rd - Transmission - Reclaim	\$0	\$0	\$0	\$300,000	\$2,100,000
417-71	T Mackey	Water	Sewer	Clay County Utility Authority (CCUA) - Southwest Wastewater Treatment Facility to CCUA - Transmission - Reclaim	\$0	\$0	\$0	\$300,000	\$1,400,000
101-18A	T Mackey	Water	Sewer	District 2 - Yellow Bluff Rd - New Berlin Rd to Victoria Lakes - Transmission - New - Force Main	\$0	\$0	\$0	\$177,000	\$936,000
100-39	T Mackey	Water	Sewer	Lenox Ave - Fouraker Rd to Palisades Dr - Distribution - New - Force Main	\$0	\$0	\$0	\$115,000	\$461,000
417-42	T Mackey	Water	Sewer	CR210 - St Johns Pkwy to Leo Maguire Pkwy - Transmission - New - Reclaim	\$0	\$0	\$0	\$100,000	\$409,000
417-44	T Mackey	Water	Sewer	Station Creek Rd - Beach Blvd to Hunt Club Rd N - Transmission - New - Reclaim	\$0	\$0	\$0	\$50,000	\$225,000
417-39	T Mackey	Water	Sewer	Bartram Trail High School - Longleaf Pine Pkwy - Transmission - New - Reclaim	\$0	\$0	\$0	\$50,000	\$183,000
898-BKM2	T Mackey	Water	Sewer	Buckman Water Reclamation Facility - Bio-Nutrient Reduction - Phase 2	\$0	\$0	\$0	\$0	\$3,000,000
180-35	T Mackey	Water	Sewer	8431 Springtree Rd - Class III/IV	\$0	\$0	\$0	\$0	\$475,000
100-61	T Mackey	Water	Sewer	US-1 - Twin Creeks Master Pump Station to Alphons St - Transmission - Force Main	\$0	\$0	\$0	\$0	\$300,000
100-63	T Mackey	Water	Sewer	Large Diameter Pipe Program - Busch Dr - Balmoral Dr to Harts Rd - Transmission - Force Main	\$0	\$0	\$0	\$0	\$20,000
102-21	R Marshall	Water	Water	Main St Water Treatment Plant - 1st St to Franklin St - Transmission	\$7,261,000	\$436,000	\$0	\$0	\$0
102-26	R Marshall	Water	Water	US1 South Water Repump Facility	\$6,785,000	\$1,850,000	\$0	\$0	\$0
175-W	M Jones	Water	Water	Water Delivery System Repair and Replacements	\$4,400,000	\$4,400,000	\$4,400,000	\$4,400,000	\$4,400,000
736-01	M Rivera-Clapp	Water	Water	Water Meter Replacement	\$3,400,000	\$3,500,000	\$3,600,000	\$6,500,000	\$6,500,000
107-10	R Marshall	Water	Water	E 1st St Main St to E 4th St - Raw Water - New	\$3,159,000	\$200,000	\$0	\$0	\$0
268-WV4	R Marshall	Water	Water	Greenland Water Treatment Plant - Expansion	\$2,610,000	\$2,225,000	\$0	\$0	\$0
407-08	R Marshall	Water	Water	Cecil Treatment Plant - Ground Storage Tank and High Service Pump	\$2,460,000	\$1,396,000	\$0	\$0	\$0
825-12	R Marshall	Water	Water	Lakeshore Water Treatment Plant - Reservoir Rehabilitation	\$2,385,000	\$800,000	\$0	\$0	\$0
736-04	M Rivera-Clapp	Water	Water	Water Meter Growth	\$2,250,000	\$2,350,000	\$2,450,000	\$2,030,000	\$2,030,000
732-02	R Marshall	Water	Water	Woodmere Water Treatment Plant - Well No 3 and Storage Tank Replacement	\$2,033,000	\$0	\$0	\$0	\$0
736-06	M Rivera-Clapp	Water	Water	Large Water Meter Replacement	\$1,820,000	\$1,925,000	\$2,030,000	\$0	\$0
187-W	T Mackey	Water	Water	Development Driven Projects - Water	\$1,710,000	\$500,000	\$500,000	\$500,000	\$500,000
137-07	R Marshall	Water	Water	Nassau Regional Water Treatment Plant - Well No 3	\$1,540,000	\$0	\$0	\$0	\$0
101-38	M Jones	Water	Water	Jammes Rd - Wilson Blvd to Harlow Blvd	\$1,479,000	\$0	\$0	\$0	\$0
101-39	R Marshall	Water	Water	Ponte Vedra Blvd 6" Cast Iron Replacement	\$1,479,000	\$0	\$0	\$0	\$0
425-06	R Marshall	Water	Water	Well Rehabilitation and Maintenance - McDuff Wells	\$1,396,000	\$0	\$0	\$0	\$0
739-01	R Marshall	Water	Water	Otter Run Water Treatment Plant Renewal and Replacement	\$1,363,000	\$0	\$0	\$0	\$0
182-W	R Marshall	Water	Water	Joint Participation Projects - Water	\$1,300,000	\$700,000	\$700,000	\$700,000	\$700,000
425-05	R Marshall	Water	Water	Well Rehabilitation and Maintenance - Fairfax Wells	\$1,188,698	\$0	\$0	\$0	\$0
101-37	R Marshall	Water	Water	Emory Circle - From Cornell Rd along Rollins Ave and Tulane Ave to Emory Circle	\$1,155,000	\$0	\$0	\$0	\$0
182-101W	R Marshall	Water	Water	Joint Project - JTA - 8th St Water Main Replacement - MI Herman St to Boulevard St	\$1,032,000	\$0	\$0	\$0	\$0
642-03	R Marshall	Water	Water	McDuff Water Treatment Plant - High Service Pump Replacement	\$1,007,000	\$1,167,000	\$0	\$0	\$0
101-41	M Jones	Water	Water	Galvanized Pipe Replacement - Program	\$1,000,333	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
102-34	R Marshall	Water	Water	Deerwood - Southside Blvd Intertie to Deerwood III Water Treatment Plant	\$1,000,000	\$4,000,000	\$6,000,000	\$8,000,000	\$7,350,000
130-02	R Marshall	Water	Water	Lofon Oaks Water Treatment Plant Improvements	\$841,583	\$550,000	\$0	\$0	\$0
102-39	R Marshall	Water	Water	(Reimbursable) - COJ - Riverview Watermain Phase 2	\$832,000	\$0	\$0	\$0	\$0
737-02	R Marshall	Water	Water	Norwood Water Treatment Plant High Service Pump	\$897,000	\$735,000	\$0	\$0	\$0

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425-10	R Marshall	Water	Water	South Grid Water Quality - Well Improvement	\$827,167	\$92,000	\$0	\$0	\$0
825-03	R Marshall	Water	Water	RiverTown - New Water Treatment Plant	\$760,000	\$4,000,000	\$6,905,000	\$1,424,000	\$0
171-02	M Jones	Water	Water	Main Extensions and Taps - Water	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000
825-04	D Calhoun	Water	Water	Water Treatment Plant Reservoir Repair and Replace	\$700,000	\$100,000	\$100,000	\$100,000	\$100,000
128-07	R Marshall	Water	Water	Ponce De Leon Water Treatment Plant - Well No 2 Replacement	\$682,000	\$628,000	\$0	\$0	\$0
825-11	D Calhoun	Water	Water	Water Treatment Plants - Sodium Hypochlorite Storage Tank Upgrades	\$640,000	\$440,000	\$440,000	\$440,000	\$440,000
101-33	R Marshall	Water	Water	Bartram - US1 - Old St Augustine Rd to US 1	\$619,000	\$5,403,000	\$2,572,000	\$0	\$0
101-44	R Marshall	Water	Water	103rd St (Cecil Field) Water Main Replacement - Cecil Commerce Ctr Pkwy to Aviation Ave	\$600,000	\$3,800,000	\$1,200,000	\$0	\$0
182-58W	R Marshall	Water	Water	Joint Project - COJ - Lower Eastside Drainage Improvements (First St - APR Blvd to Van Buren) - Water	\$600,000	\$218,000	\$0	\$0	\$0
825-01	D Calhoun	Water	Water	Water Plant Capital Renewal and Replacement	\$500,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
127-04	R Marshall	Water	Water	Westlake Water Treatment Plant - Well No 4 and Reclaim Water Main	\$495,000	\$1,930,000	\$526,000	\$0	\$0
101-34	R Marshall	Water	Water	Large Diameter Pipe Program - Palm Avenue Water Main Replacement	\$458,000	\$0	\$0	\$0	\$0
435-04	D Calhoun	Water	Water	Well Field Repair and Replace	\$450,000	\$450,000	\$700,000	\$700,000	\$700,000
102-22	R Marshall	Water	Water	Integrated Water Supply Testing Evaluation and Rehabilitation (iWATER)	\$443,000	\$0	\$0	\$0	\$0
101-42	R Marshall	Water	Water	Boulevard St Water Main Replacement - 7th St to 11th St	\$435,000	\$0	\$0	\$0	\$0
731-07	D Calhoun	Water	Water	Julington Creek Water Treatment Plant - Storage Tank Rehabilitation	\$400,000	\$0	\$0	\$0	\$0
182-99W	R Marshall	Water	Water	Joint Project - JTA - Alta Drive Roadway Improvements - Water	\$355,000	\$20,000	\$0	\$0	\$0
101-26	R Marshall	Water	Water	Main St Water Treatment Plant - Ozone Generator - Addition	\$312,000	\$1,640,000	\$1,000,000	\$0	\$0
101-32	R Marshall	Water	Water	Owens Rd - Ranch Rd to Max Leggett Pkwy - New - Water	\$288,000	\$1,272,000	\$0	\$0	\$0
101-43	R Marshall	Water	Water	King St and Shircliff Way Water Main Replacement	\$269,000	\$0	\$0	\$0	\$0
166-W	T Mackey	Water	Water	Grid - Cost Participation - New - Water	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
102-29	T Mackey	Water	Water	Pages Dairy Rd - Felmor Rd to Chester Ave - Transmission - Water Main	\$208,000	\$566,000	\$4,471,000	\$1,200,000	\$0
101-35	R Marshall	Water	Water	Large Diameter Pipe Program - Pepsi Place Water Main Replacement	\$187,000	\$0	\$0	\$0	\$0
825-13	T Mackey	Water	Water	St Johns River Water Management District - Alternative Water Supply - Pilot Plant	\$100,000	\$3,200,000	\$4,200,000	\$0	\$0
182-97W	R Marshall	Water	Water	Joint Project - FDOT - (SR111) Cassat Ave - Lenox Ave to Blanding Blvd - Water	\$57,000	\$0	\$0	\$0	\$0
182-76W	R Marshall	Water	Water	Joint Project - FDOT - SR 200 (A1A) Rubin to O'Neil Scott - Section 3 - Water	\$55,000	\$0	\$0	\$0	\$0
734-02	T Mackey	Water	Water	St Johns Forest Wells	\$50,000	\$1,000,000	\$500,000	\$0	\$0
107-06	R Marshall	Water	Water	Main St Water Treatment Plant - Well No 15 - New Lower Ft Aquifer Well	\$40,000	\$0	\$0	\$0	\$0
102-30	T Mackey	Water	Water	Mandarin Road Loop Connection - Transmission - New - Water Main	\$38,000	\$489,000	\$347,000	\$0	\$0
182-90W	R Marshall	Water	Water	Joint Project - JTA - Collins Rd - Water	\$36,000	\$28,000	\$0	\$0	\$0
182-64W	R Marshall	Water	Water	Joint Project - FDOT - SR 200 (A1A) I-95 to Still Quarters Rd - Section 1 - Water	\$9,000	\$3,000	\$0	\$0	\$0
182-88W	R Marshall	Water	Water	Joint Project - FDOT - Pecan Park Rd - I-95 - Water	\$9,000	\$0	\$0	\$0	\$0
182-85W	R Marshall	Water	Water	Joint Project - FDOT - SR 9B - Duval - St Johns County Line to CR2209 - Water	\$3,000	\$0	\$0	\$0	\$0
101-21	T Mackey	Water	Water	103rd St - Pressure Sustaining Valve - Addition	\$0	\$2,250,000	\$0	\$0	\$0
172-01W	R Marshall	Water	Water	Large Diameter Pipe Program - Water Transmission Replacement	\$0	\$850,000	\$4,500,000	\$3,200,000	\$4,200,000
191-02	T Mackey	Water	Water	N Main St Dr - Setzer Rd to Gun Club Rd - Transmission - New - Water	\$0	\$280,000	\$1,100,000	\$2,382,000	\$0
101-07	T Mackey	Water	Water	Cisco Dr - Westlake Water Treatment Plant to Garden St - Transmission - New	\$0	\$220,000	\$850,000	\$1,895,000	\$0
825-15	D Calhoun	Water	Water	Water Treatment Plant Large Capital Improvements	\$0	\$150,000	\$8,700,000	\$4,800,000	\$16,250,000
101-13	T Mackey	Water	Water	Trout River Blvd - US1 to Sibald Ave - Transmission - New - Water	\$0	\$150,000	\$580,000	\$1,296,000	\$0
101-05	T Mackey	Water	Water	Pritchard Rd - Old Plank Rd to Cisco Dr West - Transmission - New - Water	\$0	\$140,000	\$540,000	\$1,192,000	\$0
102-37	R Marshall	Water	Water	Greenland - Southside Blvd - Deerwood 3 to Greenland	\$0	\$50,000	\$3,350,000	\$7,540,000	\$7,540,000
150-10	T Mackey	Water	Water	Southeast Water Treatment Plant Ground Storage Tank	\$0	\$50,000	\$2,000,000	\$500,000	\$0
107-04	R Marshall	Water	Water	Main St Water Treatment Plant - Wells 7 and 12 Lining	\$0	\$50,000	\$250,000	\$0	\$0
127-03	T Mackey	Water	Water	Westlake Water Treatment Plant - Expansion	\$0	\$50,000	\$150,000	\$500,000	\$2,000,000
102-33	R Marshall	Water	Water	US1 Booster Pump Station - Old St Augustine Rd to US1 Booster Pump Station	\$0	\$0	\$675,000	\$1,588,000	\$5,486,000
438-02	T Mackey	Water	Water	Ft. Caroline Rd - McCormick Rd to Fulton Rd - Distribution - New	\$0	\$0	\$210,000	\$805,000	\$1,785,000
102-27	T Mackey	Water	Water	Nocatee South Water Repump	\$0	\$0	\$200,000	\$800,000	\$3,000,000
102-38	R Marshall	Water	Water	Ridenour - Cortez to Ridenour Water Treatment Plant - New - Water	\$0	\$0	\$200,000	\$800,000	\$3,000,000
096-04	T Mackey	Water	Water	Oakridge Water Treatment Plant High Service Pump Expansion	\$0	\$0	\$50,000	\$300,000	\$1,500,000
425-13	T Mackey	Water	Water	Brienwood Water Treatment Plant High Service Pump Expansion	\$0	\$0	\$50,000	\$300,000	\$1,500,000
101-10	T Mackey	Water	Water	New World Av - Waterworks Ave to Chaffee Rd - Transmission - New - Water	\$0	\$0	\$0	\$500,000	\$500,000
101-06	T Mackey	Water	Water	Chaffee Rd - Westmeadows Dr S to Samaritan Wy - Transmission - New - Water	\$0	\$0	\$0	\$500,000	\$226,000
438-07	T Mackey	Water	Water	Beacon Hills Ground Storage Tank	\$0	\$0	\$0	\$500,000	\$0
101-08	T Mackey	Water	Water	Jones Rd - Teague Rd to Pritchard Rd - Transmission - New - Water	\$0	\$0	\$0	\$250,000	\$1,000,000
102-35	R Marshall	Water	Water	Oakridge - Saints Rd - Sewer/Johns Bluff to Oakridge Water Treatment Plant	\$0	\$0	\$0	\$140,000	\$538,000
102-38	R Marshall	Water	Water	Southeast - T-Line to Southeast Water Treatment Plant - Water	\$0	\$0	\$0	\$50,000	\$1,290,000
831-03	T Mackey	Water	Water	Royal Lakes Water Treatment Plant High Service Pump Expansion	\$0	\$0	\$0	\$50,000	\$300,000
740-01	T Mackey	Water	Water	Lovegrove High Service Pump and Building Replacement - Expansion	\$0	\$0	\$0	\$50,000	\$40,000
351-W	J Nelson	Water	Water Other Capital Projects	Capital Administrative Overhead - Water	\$5,200,000	\$5,200,000	\$5,200,000	\$5,200,000	\$5,200,000
211-W	A McElroy	Water	Water Other Capital Projects	Fleet - Replacement - Water	\$4,428,000	\$4,903,000	\$5,231,000	\$4,905,000	\$4,931,000

Forecast CF

Index No	Project Owner	Service	City Rollup	Project Description	FY19 Total	FY20 Total	FY21 Total	FY22 Total	FY23 Total
007-99W	C Edgar	Water	Water Other Capital Projects	TS - Projects - Water	\$4,310,000	\$4,930,000	\$6,490,000	\$5,930,000	\$7,150,000
207-19	J McCarthy	Water	Water Other Capital Projects	Buckman - New Administration Building	\$3,611,000	\$0	\$0	\$0	\$0
905-W	J McCarthy	Water	Water Other Capital Projects	Facilities Generators - Water	\$2,310,000	\$2,435,000	\$4,835,000	\$3,715,000	\$4,505,000
008-213W	C Edgar	Water	Water Other Capital Projects	TS - Class III and IV Pump Station Fiber Build	\$1,950,000	\$0	\$0	\$0	\$0
195-W	B Edwards	Water	Water Other Capital Projects	Facilities Security - Water	\$635,000	\$635,000	\$635,000	\$635,000	\$635,000
248-W	J McCarthy	Water	Water Other Capital Projects	Facilities Heating, Ventilation, and Air - Water	\$520,000	\$520,000	\$520,000	\$520,000	\$520,000
008-30W	C Edgar	Water	Water Other Capital Projects	TS - Technology Security	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
207-28W	J McCarthy	Water	Water Other Capital Projects	Buckman Water Reclamation Facility - Street Lighting and Paving Upgrades	\$500,000	\$0	\$0	\$0	\$500,000
207-TP09	J McCarthy	Water	Water Other Capital Projects	JEA Tower - Building Renovations	\$500,000	\$0	\$0	\$0	\$0
250-W	J McCarthy	Water	Water Other Capital Projects	Facilities Roof Replacement - Water	\$400,000	\$400,000	\$435,000	\$435,000	\$435,000
207-W	J McCarthy	Water	Water Other Capital Projects	Facilities Improvements, Building Upgrades - Water	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
207-W3	J McCarthy	Water	Water Other Capital Projects	Facilities Improvements, Electric and Lighting Systems	\$300,000	\$400,000	\$400,000	\$400,000	\$400,000
008-97WR	C Edgar	Water	Water Other Capital Projects	TS - JEA.COM - Repair and Replace - Water	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
211-02W	A McElroy	Water	Water Other Capital Projects	Fleet - Expansion - Water	\$278,833	\$1,000	\$1,000	\$1,000	\$1,000
207-W2	J McCarthy	Water	Water Other Capital Projects	Facilities Improvements and Plumbing Upgrades	\$275,000	\$250,000	\$250,000	\$250,000	\$250,000
008-187W	C Edgar	Water	Water Other Capital Projects	TS - Oracle EAM Migration	\$270,000	\$0	\$0	\$0	\$0
209-W	J McCarthy	Water	Water Other Capital Projects	Facilities - Paving and Site Improvements - Water	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
207-30W	J McCarthy	Water	Water Other Capital Projects	Mandarin Water Reclamation Facility - Facility Parking and Storage Building	\$200,000	\$2,000,000	\$0	\$0	\$0
207-29W	J McCarthy	Water	Water Other Capital Projects	Southwest Water Reclamation Facility - Facility Buildings 1 and 3 Upgrades	\$196,000	\$1,415,000	\$0	\$0	\$0
011-W03	J McCarthy	Water	Water Other Capital Projects	Real Estate Services - Easement Location and Acquisitions	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
008-184W	C Edgar	Water	Water Other Capital Projects	TS - Active Directory Upgrade	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
208-SS11	B Edwards	Water	Water Other Capital Projects	Security - Fencing - Water	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
260-01	K Holbrooks	Water	Water Other Capital Projects	Laboratory Equipment Upgrades - Water	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
012-05W	J McCarthy	Water	Water Other Capital Projects	Utility Locate Group - Capital Equipment - Water	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
008-187W	C Edgar	Water	Water Other Capital Projects	TS - JEA Wireless Infrastructure	\$0	\$1,000,000	\$1,000,000	\$0	\$0
207-23W	J McCarthy	Water	Water Other Capital Projects	Springfield Lab Hood Upgrade	\$0	\$400,000	\$400,000	\$0	\$0

The following items were requested to be followed up on by the Council Auditor's Office at a prior meeting.

- How much would St. Johns and Nassau counties have to pay to purchase the JEA assets in their jurisdiction?
 - Per the interlocal agreement between each county and JEA, the county may purchase the JEA assets for a price equal to one hundred ten percent (110%) of the net investment by JEA. JEA calculated those amounts to be:
 - Nassau County - \$44,665,872
 - St. Johns County - \$217,968,703
- Did the IOUs that prevailed in Value Adjustment Board challenges to property valuations challenge those same valuations the following year?
 - The properties that FPL challenged in FY 2016 were not the ones that were reduced in FY 2015.
- What is the origin and difference for charging the Public Service Tax and the Franchise Fee?
 - The Public Service Tax was originally filed in 1945 to provide the authority to tax public services which include the sale of electricity, metered or bottled gas, and water service. The Franchise Fee has been in place since at least 1983 and is a charge for the use of the public right-of-way. Both charges are passed on directly to the customer.
- How is the Franchise Fee applied to electric customers?
 - The Franchise Fee is applied to the first \$2.4 million of electric revenues per fiscal year charged to a customer. After the customer has been billed \$2.4 million of applicable electric charges, the franchise fee is no longer charged. The most a customer will pay in annual franchise fees is \$72,000 (3% of \$2.4 million).
- What would the chart on page 1 of the Auditor's report look like if it were separated out between electric and water/sewer systems?
 - See Attachment 1

**Council Auditor's Office
Estimated Net Proceeds by System**

	<u>Electric</u>		<u>Water & Sewer</u>	
	<u>Minimum</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Maximum</u>
Gross Value (1)	\$ 4,500,000,000	\$ 5,500,000,000	\$ 3,000,000,000	\$ 5,500,000,000
Less:				
JEA Long-Term Debt	2,350,000,000	2,350,000,000	1,550,000,000	1,550,000,000
Plant Vogtle Obligation	1,200,000,000	1,200,000,000	-	-
GEPP Pension UAAL (2)	330,025,000	330,025,000	211,000,000	211,000,000
Interest Rate Swap termination cost	80,000,000	80,000,000	20,000,000	20,000,000
JEA OPEB UAAL * (2)(3)	21,060,844	21,060,844	13,465,156	13,465,156
Environmental Liabilities	21,654,000	21,654,000	-	-
Net Proceeds to the City (4)	<u>\$ 497,260,156</u>	<u>\$ 1,497,260,156</u>	<u>\$ 1,205,534,844</u>	<u>\$ 3,705,534,844</u>

* The percentage of the GEPP UAAL by system was determined and used as the factor to split the OPEB UAAL between the systems. An actuary would have to determine the exact effect of splitting the OPEB UAAL between the Electric & Water/Sewer Systems.

(1) Ranges calculated by Public Financial Management in its report titled "The Future of JEA: Opportunities and Considerations" released on February 14, 2018.

(2) UAAL = Unfunded Actuarial Accrued Liability

(3) OPEB = Other Post-Employment Benefits

(4) Net Proceeds have not been reduced by fees and expenses associated with the sale.

Evans, Nicole

From: Sherry Magill <smagill@dupontfund.org>
Sent: Monday, April 02, 2018 5:15 PM
To: Crescimbeni, John
Cc: Mary Littlepage
Subject: Jessie Ball duPont Fund Study

Dear Task Force Chairman Cresembini:

On behalf of the Jessie Ball duPont Fund, I wish to inform you that the Fund has contracted with the University of Florida Public Utility Research Center to conduct an independent analysis of a potential sale of JEA. You may find our statement and the research study scope on our website, www.dupontfund.org. Just scroll down under news and select the first item.

We look forward to sharing the findings with you and members of City Council when the study is complete.

Sincerely,

Sherry Magill, PhD
President
Jessie Ball duPont Fund
40 East Adams Street, Suite 300
Jacksonville, Florida 32202

800-252-3452
904-353-0890



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Jessie Ball duPont Fund Underwrites Analysis of Jacksonville Municipal Utility Sale

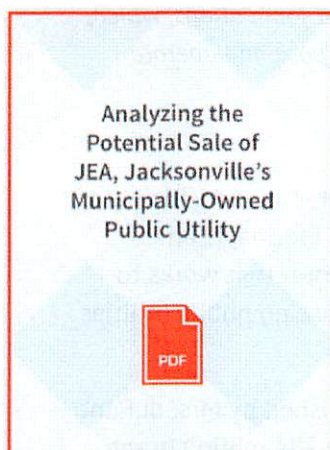
The Jessie Ball duPont Fund has commissioned the University of Florida Public Utility Research Center to conduct an independent analysis of the potential sale of the Jacksonville Electric Authority, the municipally-owned utility that provides electric, water and sewer services to Greater Jacksonville.

“This six-month study is intended to help inform the discretion of City Council, the administration and the public to ensure the Jacksonville community makes the best possible decision,” said Sherry Magill, president of the Fund.

Since November 2017, Jacksonville leaders have been embroiled in debate over the future of JEA after its outgoing chairman suggested that the City look into selling the utility.

JEA serves more than 450,000 electric, 340,000 water and 264,000 sewer customers, and employs about 2,000 workers. Established in 1968, it is an independent agency of the City of Jacksonville. It has high ratings for customer service and its average monthly bills, as a percentage of ratepayers’ household income, are below the national average.

This is not the first time the City has considered selling the JEA but previous studies concluded the City and ratepayers would be better served by keeping JEA municipally owned. However, rapid changes in the utility industry suggest the need for a new evaluation.



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In February, JEA released a report by Public Financial Management, which has served as JEA's financial advisor since 2002, stating that the City might net between \$2.9 billion and \$6.4 billion through a timely sale.

Shortly after, the City Council Auditor's Office issued a report estimating the net gain would be smaller – \$1.7 billion to \$5.2 billion – and raising a number of risks that would be associated with the City losing control of the utility. A City Council committee has been established to evaluate the merits of selling the utility and both sale and no-sale proponents have lit up social media. In this over-heated environment, the Jessie Ball duPont Fund offered to underwrite the cost of an independent analysis of the question.

“Helping citizens grapple with difficult issues is an important role for private, independent foundations, which, by definition, serve a broad public purpose and operate free of political influence,” Magill said.

The Public Utility Research Center, located in the Warrington College of Business at the University of Florida, is an internationally recognized academic center that works to enhance understanding of issues confronting public utilities and regulatory agencies.

The Jessie Ball duPont Fund was established by Mrs. duPont upon her death in 1970. It has invested \$84 million grant dollars in Jacksonville-based organizations and commissioned numerous studies to benefit the community on topics ranging from the neighborhood revitalization and juvenile justice to Medicaid reform, affordable housing, historic building reuse and housing markets.

A copy of UF's proposal outlining the scope of their research is [attached](#).

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Analyzing the Potential Sale of JEA, Jacksonville's Municipally-Owned Public Utility

Proposed Scope of Work

Public Utility Research Center
Warrington College of Business
University of Florida

March 29, 2018

Purpose

The Public Utility Research Center (PURC) will provide the Jessie Ball duPont Fund (Fund) with an academic-quality analysis of the potential sale of JEA, Jacksonville's municipally-owned public utility. JEA serves approximately 458,000 electric, 341,000 water and 264,000 sewer customers. There has been recent discussion about selling the utility, which raises a number of issues, such as:

- What would be the financial impacts on the city and on the JEA customers? What other impacts would there be?
- Should a sale be just the electric portion or all three areas of operation? If all three, should they be sold as a bundle or separately?
- What are the risks that JEA faces? How do these affect the future of the utility?
- If all or part of JEA is sold, what happens with the proceeds?
- How can city leaders best prepare themselves to address these and other issues?

To help answer these and other questions, PURC will assemble a team of utility and regulatory experts with extensive experience in academic research, the economics and governance of municipal utilities, and the regulation of private utilities. Because the research will be an academic project and not a consulting project, the PURC team (hereafter, Project Team) will have complete discretion over the content of the research report and the funding will be in the form of a grant to the university.

Following are descriptions of the study methodology, deliverables, Project Team, PURC, and the proposed budget.

Study Methodology

The Project Team will use a wide variety of information sources and analytical techniques to address the broad issues raised by this project. The data and tools necessary to address the individual components of the study are detailed below.

Topic 1. An explanation of the value of JEA, including its financial and non-financial value, to the City of Jacksonville, to include a separate valuation of electric, water-sewer, and Internet services

The value of a utility to its owners has two aspects. The first is the value of the physical assets of the utility and the second is the ability to utilize those assets to generate value for the owners and customers. The physical value of the assets can be measured as either the original cost, the cost incurred to purchase the assets at the time they were installed, or the replacement cost, the costs necessary to replace the assets today. The asset value may also incorporate depreciation, an accounting construct reflecting the fact that physical assets wear out and become less effective over time. The choice of valuation method depends upon the reason for identifying the value. The original cost identifies the cash value that the owners provided to purchase the assets, less any cost recovery. It is often used in setting utility rates where a primary objective is providing the owners an opportunity for a return on and a return of their original investments. The replacement cost identifies what it would cost in current dollars to replace the utility plant as is. This approach is used to reflect the effects of inflation on the capital that owners provided for the utility plant.

The second aspect of the value of a utility is the going concern value of the assets. Going concern reflects the ability of the physical assets to produce value for the owners over time. Going concern is typically measured as the discounted flow of the normalized earnings of a company, rather than just the earnings for a particular year. Section 73.0715, Florida Statutes, requires that going concern value be included in the valuation of any private utility in the case of a sale to a municipality.

This study will express the value of JEA in both ways as the city may wish to look at the potential sale from different vantage points.

The Project Team will rely primarily on the audited financial statements of JEA and other public filings. Investor-owned utilities and rural cooperatives are required to file an Annual Report (known as a Form 1) with the Federal Energy Regulatory Commission. This report includes a separate accounting of all generation, transmission, and distribution assets of an electric utility, as well as detail on administrative and operations expenses, based on an established Chart of Accounts, and would form the basis of a study such as this if the subject were an investor-owned or cooperative utility. However, municipal utilities such as JEA are exempt from these Federal filing requirements. While this data could possibly be obtained from JEA through a data request, JEA is under no obligation to comply with such a request. As a result, the audited financial statements of JEA consolidated and any detail for the Electric Enterprise, Water and Sewer Enterprise, and District Energy System will be the primary data source for this question. JEA does not separately account for any other services that they provide. Without such information it is impossible to separately value them with much legitimacy.

All utilities, including JEA, are also required to file the Annual Electric Power Industry Report with the Department of Energy's Energy Information Administration (known as the Form EIA-861). This report

encompasses operating data for the utility including kWh sales and revenues by customer class, rudimentary reliability metrics, and information on renewable energy and energy efficiency programs. This database will be utilized as a source for electric utility operational data.

A further consideration when contemplating the value of JEA is the peculiarity of the regulated utility sector. Because the people of Jacksonville are both the owners and customers of JEA, they could be impacted twice by any purchase price for the utility. Regardless of the price paid, any private entity purchasing JEA would probably seek utility rates at the Florida Public Service Commission that allow it to recover that purchase cost from the customers currently served by JEA. Based on this insight, the Project Team will distinguish between the value of JEA to its owners and the value of JEA to its customers.

One aspect of the comparison of Jacksonville citizens as owners versus customers is that the relative rate levels for residential and business customers may change. If a private entity purchases JEA's electric operations, the Florida Public Service Commission will set these rates. The Project Team will provide information on how the regulatory has set these prices for investor owned utilities.

Topic 2. The effectiveness of JEA's operations and management

The Project Team will conduct a benchmarking analysis of Florida investor-owned, cooperative and municipal utilities. The metrics used for the analysis will be operating and maintenance expenses per kWh or kgal delivered and operating and maintenance expenses per customer, for both the water and electric utility. As explained in Topic 1, municipal utilities are exempt from the Federal filing requirements where such expenses would be detailed. However, JEA's audited financial statements do distinguish between fuel, purchased power, and operating expenditures, and this distinction will be utilized for this benchmarking study.

Benchmarking is defined as a means of quantifying the relative performance of companies or divisions (such as regional distribution companies). Summary performance indicators, such as output per worker, are often used to identify trends, determine baselines, and identify reasonable targets—based on a sample of comparable firms. Performance scores can also be based on more comprehensive production or cost models, using econometric or data envelopment analysis. Studies vary in levels of sophistication and ease of interpretation, but all can provide important information regarding the relative performance of firms who face comparable production conditions.¹

Florida municipal utilities that do not file distinct financial statements for their electric and water utilities, such as those where the utility is a department of the city, will not be utilized in this analysis.

Topic 3. The relative position of JEA in the utility industry, including its size, operational effectiveness, lines of business, fiscal health, customer service, and nature of ownership

The Project Team will characterize JEA according to its size, operations, lines of business, and nature of ownership and compare it to comparable utilities. This will be done with various data sources to address the relative position of JEA for these metrics. The standing of its size can be determined through the EIA-

¹ For further information, see PURC's Body of Knowledge on Infrastructure Regulation <http://regulationbodyofknowledge.org/glossary/b/benchmarking/>.

861 database. Operational effectiveness will be assessed through the benchmarking study in Topic 2. Relative standing, in lines of business, and nature of ownership will be assessed through a survey of all municipal utilities in Florida. To the extent that such a survey exists for the roughly 2,000 municipal utilities outside of Florida, that survey will be incorporated into this assessment. Relative standing in financial health will be assessed through JEA's performance in various liquidity, asset utilization, and profitability ratios, benchmarked against other utilities in Florida. For customer service, data on outage frequency and outage duration is available through the Form EIA-861, and JEA's relative standing in Florida will be benchmarked through these metrics.

Topic 4. An understanding of the future of the utility industry, i.e., how utilities – publicly or privately owned – maintain stable revenue in an industry being “disrupted” by innovation in non-traditional sources of energy and energy-saving appliances, etc.

Regulated industries such as utilities, through the regulatory compact, can be seen as less susceptible to economic disruptions than non-regulated entities, but that does not mean that they are immune. Continued penetration of distributed generation (particularly rooftop photovoltaic systems) and an increased role of energy storage have the potential to disrupt the legacy centralized generation market for electric utilities. The Project Team will conduct literature reviews and gather case studies to assess the threats and opportunities to JEA as a result of these technologies and extract lessons and potential impacts on JEA's finances.

Topics 5 and 6. The positive benefits of private ownership; of public ownership; and the negative aspects of private ownership; of public ownership

The Project Team will conduct a literature review of academic and trade studies that have assessed the advantages and disadvantages of public sector and private sector ownership of utilities. These studies tend to focus on whether a particular ownership model is more effective of providing a particular type of service. For example, one member of the Project Team has conducted a study of whether utilities change their behavior in wholesale markets when those markets become liberalized. He found that investor-owned utilities tend to participate more in open wholesale markets and that municipal utilities and cooperatives tend to withdraw from these markets and participate less, and that any benefits derived from open wholesale markets may not be distributed uniformly across the electricity sector. Other members of the team have conducted research on how privatization affects efficiency, investment, and innovation.

The services addressed in this analysis will include, but not be limited to, rates, costs, reliability of service, efficiency, investments innovation, and access to service. Once the literature review is complete, the Project Team will extract relevant lessons for JEA from the findings.

Topic 7. An analysis of market risk and how market risk may impact JEA

JEA is impacted by two principal market-based risks: fuel prices and interest rates. The Project Team will conduct simulations of fuel prices and interest rates, based on historical volatility, to construct probability distributions of fuel costs and interest expenses and assess the impact that this uncertainty has on JEA's ability to meet its obligations.

The Project Team will also conduct an assessment of the impact that a change in ownership would have on JEA's ability to mitigate market risk. For example, JEA currently maintains the Fuel Stabilization Fund, an internal fund used to insulate customers from the impact of short term variability in fuel costs. While this financial tool is utilized by many municipal and cooperative utilities, this mechanism is currently not permitted for investor-owned utilities regulated by the Florida Public Service Commission. Further, the Florida Public Service Commission has been scrutinizing the effectiveness of fuel hedging programs for investor-owned electric utilities and has suspended the practice. If JEA were to be purchased by a private entity, it would also be impacted by this suspension.

In addition, the value of JEA is potentially impacted by the value of electric utilities in the market, so the Project Team will conduct an analysis of the volatility of the value of electric and water utilities in the United States, relative to the market rates of risk. The measure is commonly referred to as the beta of an industry.

The Project Team will also assess the risk to JEA of changes in the utility sector described in Topic 7. In particular, there is demand risk from the growth of what is called distributed energy resources. This is essentially the growth of customer solar, community solar, and battery technologies that affect the demand for energy that JEA might sell, and JEA's planning for its electricity grid.

Topic 8. An analysis of JEA's liabilities and an explanation of how these liabilities will affect any potential sale of JEA, including JEA's obligation to purchase nuclear power

This analysis is an important component of the value of JEA and will be included in Topic 1, the valuation analysis. The details will be provided there.

Topic 9. An understanding of JEA's water-sewer business, particularly its liabilities

This analysis is an important component of the value of JEA and will be included in Topic 1, the valuation analysis. The details will be provided there.

Topic 10. An understanding of JEA's responsibilities regarding water-sewer, should only the JEA's electric business be sold

Joint ownership permits separate lines of business to share resources without financial transactions and formal contracts. It is unclear from the information PURC has reviewed whether JEA has taken advantage of this opportunity, or if it operated water, sewer and electricity as separate businesses with payments for services between operating entities, such as the energy business's use of water and sewer services. The revenue and expense consequences for JEA's water and sewer operations becoming a utility provider to and a customer of the spun-off electricity business will be estimated and incorporated into a financial projection.

Perhaps of even greater importance is the question of separation costs, or the costs necessary to separate the systems when a utility changes. Under Section 73.0715, Florida Statutes, the municipal entity is responsible for separation costs in the event of the municipalization of an investor-owned utility. In a privatization, the responsibility for separation costs is a negotiable item.

The separation costs would include the costs necessary to separate any physical systems and to relocate, for example, water utility assets that might be located on electric utility property. These costs would also include the separation of any shared computer systems, such as billing systems or automated data transfer systems.

The Project Team will identify potential sources for separation costs and discuss methods by which these costs might be identified. The Project Team will also gather any information regarding separation costs in its survey of utility privatizations in item #12. The quantification of these separation costs is beyond the scope of this research.

Topic 11. An understanding of services JEA provides that might not be obvious to rate-payers, and what might happen to those services should JEA be sold

The Project Team will research annual reports and other public sources for services provided by JEA that may be outside its scope as an electric, water and sewer, or district energy provider. The Project Team will then assess any limits, imposed by Florida Statute or Florida Public Service Commission rule, on these services if the ownership of JEA changes.

Topic 12. A listing of any such sales in the continental United States, and how long these sales typically take

The Project Team will conduct a review of electric and water utility privatizations in the United States to compile the information necessary to address this question. Once the review is complete, the Project team will extract relevant lessons for process streamlining and the reduction of transactions costs.

Topic 13. An understanding of how the proceeds were used following the sale of a municipally owned utility. For example, when a public hospital is sold to private owners, typically the proceeds are placed in a permanent endowment for meeting a public purpose.

In its review for item #12, the Project Team will gather any information regarding the disposition of any proceeds from sales of other municipal utilities, as well as any conditions of the sale that imposed limits on the use of the proceeds. The Project Team will then extract any relevant lessons or policies that could apply to JEA.

Project Team

Dr. Ted Kury, PURC director of energy studies, will lead the Project Team. At PURC he is responsible for promoting research and outreach activities in energy regulation and policy. He develops research strategies that inform the academic community and practitioners on emerging issues and best practices and serves as an expert resource for regulatory professionals, policymakers, and service providers in Florida and around the world.

Dr. Kury serves on the steering committee of UF's Florida Institute for Sustainable Energy. He also collaborates with faculty at other universities around the state as part of the Florida Energy Systems Consortium, a consortium created by the governor to leverage the expertise of Florida's research community. In addition, Dr. Kury assists in the coordination of Florida's hurricane hardening efforts.

Previously, Dr. Kury was a senior structuring and pricing analyst at The Energy Authority in Jacksonville, Florida where he developed proprietary models relating to the management of system-wide cash flows at risk, including the quantification of portfolio risk related to both physical utility and financial assets. He also built custom software packages to quantify cross commodity risk, valuation, and optimization of natural gas storage with dynamic programming. He was also a senior economist at SVBK Consulting Group in Orlando, Florida. Some of his duties there included participating in legal proceedings relating to the deregulation of electric markets and helping municipal electric, natural gas, and water/wastewater utilities develop retail rates. He has delivered numerous presentations at research conferences and has served as an expert witness before the Federal Energy Regulatory Commission and the Florida Public Service Commission.

Dr. Kury's work has been featured on CNN, Fox News, NPR, and the Wall Street Journal. He has published papers on the efficacy of energy regulatory policy and the quantification of risk, is a referee for several journals, and a member of the United States Association for Energy Economics. Dr. Kury received his Ph.D. in Economics from the University of Florida.

Attachment 1 highlights aspects of Dr. Kury's experience that are directly relevant to this project.

David Richardson will serve as the Project Team's expert on water, sewer and municipal operations expert. Mr. Richardson is currently serving as Senior Fellow for PURC. Formerly he was serving as the Interim Chief Financial Officer for Gainesville Regional Utilities, where he was responsible for the overall financial management and internal control structure. He has worked for GRU since 1986 in various positions, including Senior Engineer (1986 – 2001), System Planning Director (2002 – 2004) and Assistant General Manager (2005 – 2013). Mr. Richardson holds a Bachelor of Science degree in Environmental Engineering from the University of Florida and a Master of Science degree in Engineering Administration from the University of Central Florida.

Cindy Miller will serve as a regulatory and legal expert for the Project Team. Ms. Miller is a private consultant specializing in energy, telecommunications, and Florida administrative law. In 2017, she was elected to serve as Vice President of the Southern Chapter (covering 13 states) of the Energy Bar Association. She continues also as co-chair of the Florida Bar Public Utilities Law Committee. She served as a Senior Attorney (intergovernmental counsel) at the Florida Public Service Commission for more than 20 years. She was responsible for monitoring legislation, Federal energy and telecommunications actions and preparing comments and Court documents for the Commission's consideration. In the energy arena,

these included comments to the Federal Energy Regulatory Commission on reliability and public policy matters related to energy delivery and state jurisdiction. She made presentations at more than 200 Internal Affairs. She was the lead attorney on dozens of complex rulemakings and worked on public records/ethics issues. Prior to working at the Florida Commission, she was Inspector General at the Florida Department of Management Services. She also worked at the Greenberg Traurig law firm (previously Roberts, Baggett, LaFace and Richard) in legislative activities. She previously lived in Washington, D.C., and worked as a Presidential Management Intern and management analyst at the U.S. Office of Management and Budget. She has been admitted to practice in the Florida Supreme Court, the D.C. Circuit Court of Appeals, and the Fifth Circuit Court of Appeals. Ms. Miller received her J.D. from the University of Florida and a MPA from Florida State University.

Dr. Mark Jamison will serve as a senior advisor for the Project Team. Dr. Jamison is the director and Gunter Professor of PURC. He provides international training and research on business and government policy, focusing primarily on utilities and network industries. He directs the PURC/World Bank International Training Program on Utility Regulation and Strategy. Dr. Jamison's current research topics include leadership and institutional development in regulation, competition in telecommunications, and regulation for next generation networks. He has conducted education programs in numerous countries in Asia, Africa, Europe, the Caribbean, and North, South, and Central America. Dr. Jamison is also a research associate with the UF Center for Public Policy Research. He blogs for the American Enterprise Institute and for The World Bank. Dr. Jamison served on the US Presidential Transition Team in 2016-2017, focusing on the Federal Communications Commission. He is the former associate director of Business and Economic Studies for the UF Center for International Business Education and Research and has served as special academic advisor to the chair of the Florida Governor's Internet task force and as president of the Transportation and Public Utilities Group. Previously, Dr. Jamison was manager of regulatory policy at Sprint, head of research for the Iowa Utilities Board, and communications economist for the Kansas Corporation Commission. He has served as chairperson of the National Association of Regulatory Utility Commissioners (NARUC) Staff Subcommittee on Communications, chairperson of the State Staff for the Federal/State Joint Conference on Open Network Architecture, and member of the State Staff for the Federal/State Joint Board on Separations. Dr. Jamison was also on the faculty of the NARUC Annual Regulatory Studies Program and other education programs. Dr. Jamison received his Ph.D. in economics from the University of Florida.

Deliverables and Schedule

PURC anticipates that the project will take about 6 months to complete. Following is the proposed schedule of deliverables. The work will begin with an inception report. Feedback from the Fund should be provided within a week and a final inception report approved within one month of the awarding of the grant. There will be three monthly reports so that the Fund is aware of the progress and initial findings. Feedback should be provided within a week, perhaps including conference calls if agreed upon by the Fund and the Project Team. A draft final report will be provided within 4 months.

Deliverable Item	Date Delivered
Draft inception Report and work plan	2 weeks from award
First monthly progress report	End of first full month after final inception report
Second monthly progress report	End of second full month after final inception report
Third monthly progress report	End of third full month after final inception report
First draft report	3 months after final inception report
Last draft report	4 months after final inception report
Final report	5 months after final inception report

About PURC

The Public Utility Research Center at the University of Florida is an internationally recognized academic center dedicated to research and to providing training in utility regulation and strategy, as well as the development of leadership in infrastructure policy.

Founded in 1972, the Public Utility Research Center is located in the Warrington College of Business at the University of Florida. We strive to enhance the understanding of issues confronting public utilities and regulatory agencies through conferences, seminars and training programs; through research covering the energy, telecommunications, and water sectors, and by preparing students for careers in infrastructure industries.

Our programs teach the principles and practices that support effective utility policy, regulation, management, and leadership. With these tools, we help government and industry officials develop efficient utility infrastructure to better meet the needs of their customers.

Our extensive network of utility and regulatory experts around the world works with us to connect theory and practice in ways that extend our understanding of these sectors; we deliver training programs in Florida, the nation, and around the world.

PURC has provided sponsored research on energy and water topics for the State of Florida, Florida utilities, and the University of Florida, as well as conducted numerous unfunded studies of energy issues as part of PURC's academic mission. Attachment 2 contains a list of recent research papers relevant to energy and water.

Attachment 1. Directly Relevant Projects for Dr. Ted Kury

Garland Power and Light Valuation and Risk Assessment

The Project Team assisted the City of Garland as the state of Texas restructured the electricity sector. Garland Power and Light, the municipal utility that serves Garland, Texas, had to choose whether to remain a municipal utility, privatize the entire utility, privatize its generation assets, or transition to a competitive power supplier. The project included the valuation of the utility under the various scenarios as well as an assessment of the relative risk of each structure.

Competitive Wholesale Power Procurement by Municipal Utilities in the United States

The Project Team represented the municipal electric utilities in Greenwood and Seneca, South Carolina in the first competitive wholesale power procurement in the United States following the restructuring of the US electricity sector. The project included the valuation of the utilities, as a whole and as a transmission and distribution entity, feasibility of seeking power supply in the wholesale market, initiating the tendering process, evaluating offers and choosing the winning bidder. The project also involved support during the legal proceedings at the South Carolina Public Service Commission and the Federal Energy Regulatory Commission.

Imperial Irrigation District Risk Management

The Project Team led the analytical efforts in evaluating the effectiveness of the fuel hedging program for the Imperial Irrigation District in California. The District had entered into a number of hedging transactions but became concerned over the suitability of those transactions to mitigate its risk. The Project Team evaluated the factors that contributed to the District's cash at risk and tested the effects that the current hedging portfolio had on that risk. The analysis determined that the current portfolio was not effective at reducing risk and suggested the manner in which the portfolio could be adjusted to better protect the customers of the utility.

Attachment 2. Recent Papers on Energy and Water Issues

- Berg, Sanford V.** 2017. "Three Lessons for Improving Infrastructure Performance" University of Florida, Warrington College of Business, PURC Working Paper.
- Berg, Sanford V.** 2016. "Seven Elements Affecting Governance and Performance in the Water Sector" University of Florida, Warrington College of Business Administration, PURC Working Paper.
- Berg, Sanford V., and Michelle Phillips.** 2017. "Data Availability as a Key Tool for Regulating Government-Owned Water Utilities" University of Florida, Warrington College of Business Administration, PURC Working Paper.
- Berg, Sanford V., and Michelle Phillips.** 2016. "Data Transparency as a Key Tool for Regulating Government-Owned Water Utilities" University of Florida, Warrington College of Business Administration, PURC Working Paper.
- Boampong, Richard.** 2016. "Residential Energy Consumers Response to Energy Efficiency Rebates, Incentives, and Prices" University of Florida, Warrington College of Business Administration, PURC Working Paper.
- Boampong, Richard, and Michelle Phillips.** 2016. "Renewable energy incentives in Kenya: Feed-in-tariffs and Rural Expansion" University of Florida, Warrington College of Business Administration, PURC Working Paper.
- Boampong, Richard, Colin A. Knapp, and Michelle Phillips.** 2016. "The Effect of Renewable Portfolio Standards on State-Level Employment: An Ex Post Analysis" University of Florida, Warrington College of Business Administration, PURC Working Paper.
- Brown, David P., and David E. M. Sappington.** 2016. "Designing Compensation for Distributed Solar Generation: Is Net Metering Ever Optimal?" University of Florida, Warrington College of Business Administration, PURC Working Paper.
- Brown, David P., and David E. M. Sappington.** 2016. "On the optimal design of demand response policies" *Journal of Regulatory Economics*, 49(3):265-291.
- Brown, David P., and David E. M. Sappington.** 2016. "On the Role of Maximum Demand Charges in the Presence of Distributed Generation Resources" University of Florida, Department of Economics, PURC Working Paper.
- Castaneda, Araceli, and Mark A. Jamison.** 2017. "Stakeholders and Power Relations in Regulation" University of Florida, Warrington College of Business, PURC Working Paper.
- Castaneda, Araceli, Mark A. Jamison, and Michelle Phillips.** 2015. "The Essential DNA of Electricity Regulation" University of Florida, Warrington College of Business, PURC Working Paper.
- Carvalho, Pedro, Rui Cunha Marques, and Sanford V. Berg.** Forthcoming. "A Meta-Regression Analysis of Benchmarking Studies on Water Utilities Market Structure" *Utilities Policy*.

- Fikru, Mahelet, and Michelle Phillips.** 2016. "Consolidation of Municipality-owned Water Suppliers in Japan" *Water Science and Technology*, 695-702.
- Hauge, Janice A., and Mark A. Jamison.** 2016. "Identifying Market Power in Times of Constant Change" University of Florida, Warrington College of Business Administration, PURC Working Paper.
- Holt, Lynne, and Mary Galligan.** 2017. "State Public Utility Commissions' Role in Cybersecurity and Physical Security Issues: Trade-Offs and Challenges" University of Florida, Warrington College of Business Administration, PURC Working Paper.
- Holt, Lynne, and Mary Galligan.** 2017. "Utility-Led Community Solar – A "Win-Win" for Customers & Electric Utilities?" *The Electricity Journal*, 28(4):66-77.
- Holt, Lynne, and Mary Galligan.** 2015. "Florida's Proposed Constitutional Amendment on Local Solar Electricity Supply" *The Electricity Journal*, 28(4):66-77.
- Holt, Lynne.** 2015. "Political Implications of the Clean Power Plan for the 2016 Presidential Election." University of Florida, Warrington College of Business, PURC Working Paper.
- Holt, Lynne.** 2016. "U.S. Electric Utility Creditworthiness--Why the Regulatory Framework Matters" University of Florida, Warrington College of Business Administration, PURC Working Paper.
- Jamison, Mark A.** 2015. "The Economic and Political Realities of Regulation: Lessons for the Future." *Energy Regulation Quarterly*, 3:17-20.
- Jamison, Mark A.** 2016. "Emerging Institutional Weaknesses in US Regulation?" University of Florida, Warrington College of Business Administration, PURC Working Paper.
- Jamison, Mark A., and Araceli Castaneda.** 2014. "Execution and Leadership: Fulfilling Conflicting Responsibilities in Utility Regulation." *The Electricity Journal*, 27(3):67-76.
- Jamison, Mark A., and Janice A. Hauge.** 2016. "Adding Dimension to Merger Analysis" *Journal for Competition Law and Economics*, 12(1):99-112.
- Li, Fan, and Michelle Phillips.** Forthcoming. "The Influence of Regulation and the Operational Environment on Chinese Urban Water Utilities." *Water Resources Management*.
- Sappington, David E. M., and Dennis L. Weisman.** 2012. "Regulating regulators in transitionally competitive markets." *Journal of Regulatory Economics*, 41(1):19-40.
- Sappington, David E. M., and Dennis L. Weisman.** 2016. "The disparate adoption of price cap regulation in the U.S. telecommunications and electricity sectors" *Journal of Regulatory Economics*, 49(2):250-264.
- Sappington, David E. M., and Dennis L. Weisman.** 2016. "The price cap regulation paradox in the electricity sector" *The Electricity Journal*, 29(3):1-5.

Vandaele, Nicole, and Wendell Porter. 2015. "Renewable Energy in Developing and Developed Nations: Outlooks to 2040" University of Florida, Department of Economics, PURC Working Paper.