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**From:** Zahn, Aaron F. - Managing Director/CEO <zahnaf@jea.com>  
**Sent:** Wednesday, February 27, 2019 12:30 PM  
**To:** April Green (april.green@bethelite.org)  
**Subject:** FW: JEA February 28th Annual Rating Agency Presentation  
**Attachments:** Rating Agency Presentation - 2019 Feb- FINAL FITCH.pdf

FYI – this is a good detailed overview of all things JEA.

**Aaron Zahn**

Managing Director & Chief Executive Officer

Direct: (904) 665-4396

Mobile: (312) 286-1040

Fax: (904) 665-4238

Email: [zahnaf@jea.com](mailto:zahnaf@jea.com)

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**From:** Wannemacher, Ryan F. - Chief Financial Officer <wannrf@jea.com>  
**Sent:** Tuesday, February 26, 2019 2:36 PM  
**To:** (Mgmt - JEA Senior Leadership Team (SLT) <Mgmtslt@jea.com>  
**Subject:** JEA February 28th Annual Rating Agency Presentation

All,

Per the conversation this afternoon, attached is the final version of the rating agency presentation.

Thank you,  
Ryan

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**Ryan Wannemacher** | Chief Financial Officer | **JEA** | T: 904 665 7223 | C: 214 770 4366 | [wannrf@jea.com](mailto:wannrf@jea.com)

2018



# RATING AGENCY PRESENTATION



## Since our last annual update

# JEA is a Superior Electric Utility

- Maintained excellent financial and operational metrics
- Repaid \$326 million of debt in FY2018 for a total reduction of \$1.9 billion since 2009 with a continued commitment to aggressively accelerate deleveraging
  - Accelerated \$100 million of debt reduction with February 2019 defeasance and plan to drive debt to a 40-year low
- Continued to strategically plan to absorb the cost of Plant Vogtle
  - Accelerating nearly all principal due before 2028, resulting in debt service coverage of 6x and fixed charge coverage of 2x when Vogtle comes online
- Capital program includes \$897 million of projects over the next five years without the need of issuance of new debt and no base rate increases
- Rates are at the median in the state and expected to remain stable for at least five years while others are experiencing rising costs
- Closed the St. Johns River Power Park, reducing JEA carbon emissions by 30% and saving \$50 million in operating expenses per year starting in 2020

**Financial metrics reflect a thriving utility today & long into the future**

## Since our last annual update ■

# JEA is a Superior Water & Wastewater Utility

- All financial metrics are a fortress:
  - Strong balance sheet
  - Ample liquidity
  - Superior debt service coverage
- Debt service coverage expected to be 3.5x to 4x over the next five years
- Paid down \$74 million debt in FY2018 for a total reduction of \$532 million since 2011 projected to total \$827 over the next five years
  - Accelerated \$95 million of debt reduction with February 2019 defeasance
- Robust \$1 billion capital program over the next five years with ability to be cash funded with no rate changes and no new debt
- Continued commitment to investing in infrastructure to ensure reliable operation now and into the future

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**Superior performance supports a  
credit rating upgrade**



# Since We Last Met

## September 2018

Board approved engaging McKinsey & Company to consult with development of updated strategic plan

## November 2018

- Increased Revolving Credit Facility to \$500 million from \$300 million, through May 2021
- Board approved Aaron Zahn as permanent Managing Director/CEO

## January 2019

- Board adopted Guiding Principles as the basis and foundation for a forward-looking strategic planning process
- Board approved JEA Total Compensation Philosophy

## October 2018

Our Last Meeting

## December 2018

- Between 2/21/18 and 12/11/18 renewed and extended liquidity support for \$545 million in variable rate bonds
- Board approved proceeding with execution of 250MW solar PPAs and Prepaid Gas Supply agreements
- Board approved Strategic and Timely Asset Realignment (STAR) Plan
- Published FY18 Annual Report within 81 days of FYE

## February 2019

- City Council unanimously approved COJ contribution agreement, extending two years thru FY23
- \$100 million Electric and \$95 million Water-Sewer bonds defeased
- Executed natural gas prepay agreements for 12,000 MMBtu/day, saving a total of \$6.5 million over five years





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# PART 1.....

## Who We Are: Introduction





# JEA

a place where each and every employee has a strong commitment to three things: delivering an unparalleled customer experience, working together to elevate the entire team, and innovating and evolving to match our customers' needs with market trends



## JEA SERVICE TERRITORY

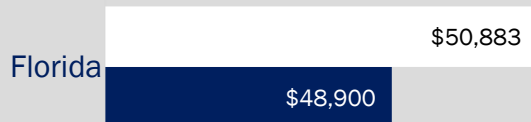
- Located in Jacksonville, Florida, our service territory includes the entire Jacksonville Metropolitan Statistical Area (MSA) which has an estimated population of 1.5 million <sup>1</sup>
- The Jacksonville MSA saw a 11.8% increase in population from April 1, 2010 to July 1, 2017<sup>1</sup>
- Our service territory also includes 130,454 meters in neighboring St. Johns, Nassau and Clay Counties

<sup>1</sup> U.S. Census Bureau, Population Division  
Annual Estimates of the Resident Population as of July 1, 2017

# ECONOMIC SNAPSHOT

## 2017 Median Household Income

Florida's median household income has increased 4.1% year over year.



Duval County median household income has increased 4.3% year over year.

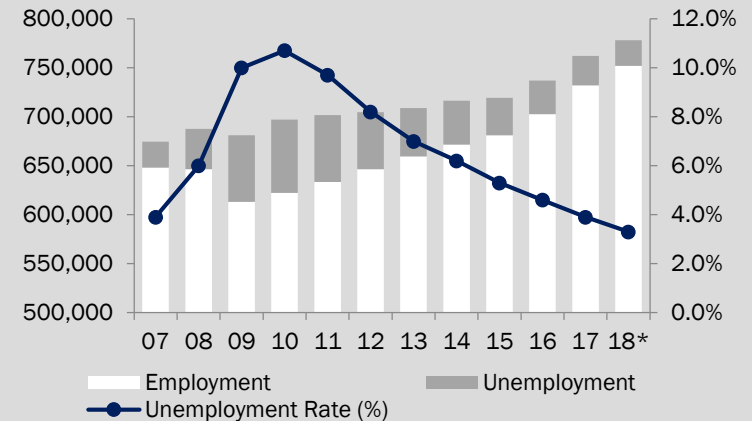


■ 2017 ■ 2016

Source: U.S. Census Bureau, "2013-2017 American Community Survey 5-Year Estimates"  
Median household income in the past 12 months (in 2017 inflation-adjusted dollars)

## Employment & Unemployment

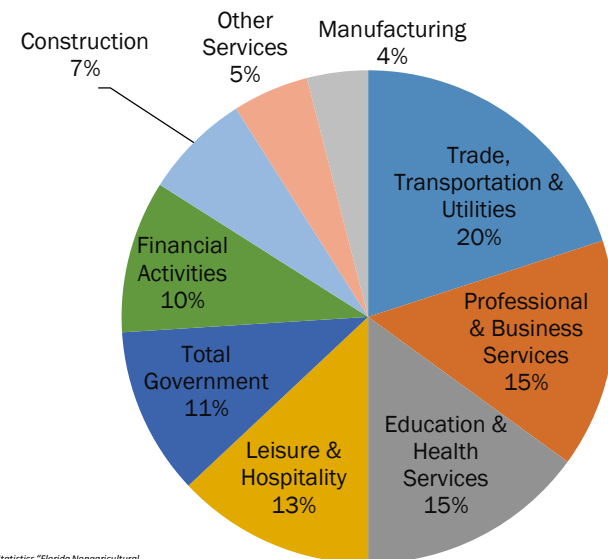
The unemployment rate in December 2018 for the Jacksonville MSA is 3.1%\*



Source: Labor Market Statistics, Local Area Unemployment Statistics Program  
FREIDA (Florida Research and Economic Information Database Application)  
Annual not seasonally adjusted labor force, employment and unemployment data in Jacksonville MSA

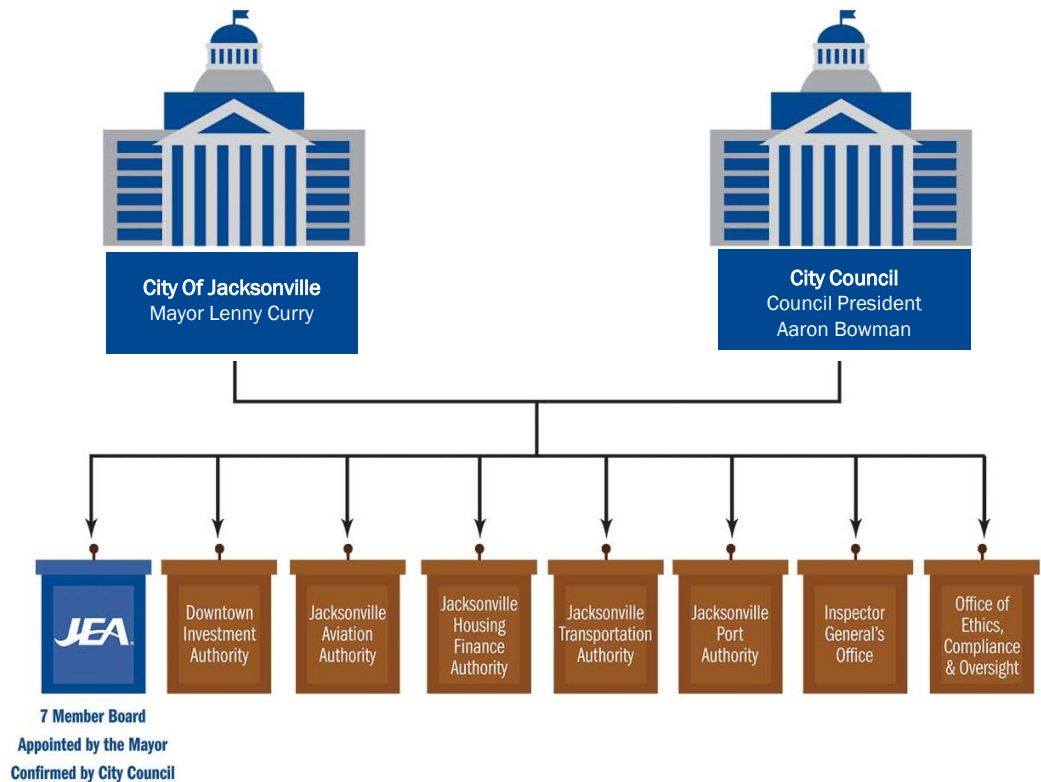
Source: Bureau of Labor and Statistics  
Unemployment Rates for Metropolitan Areas, Not Seasonally Adjusted  
\*Preliminary

## The local economy is made up of a diverse mix of industries:



Source: Bureau of Labor Statistics "Florida Nonagricultural Employment - Most Recent 12-Months"

# COJ's INDEPENDENT AUTHORTITIES AND AGENCIES





# Board Of Directors

We have been a municipal electric system since 1895 and independent agency of the City of Jacksonville, Florida since 1968

Our governing body is a Board of Directors appointed by the Mayor and confirmed by City Council

- The Board's primary responsibilities are policy, strategy, and rate making
- The Board is comprised of community leaders, professionals, and business people

Our finance and Audit Committee oversees financial policy, financial reporting, auditing, budgeting, and enterprise risk management



**G. Alan Howard**

Founder & President, Milam Howard  
Nicandri Gillam and Renner, P.A.



Term:  
02/10/2019-  
02/28/2019



**Fredrick Newbill**

Pastor, First Timothy Baptist Church



Term:  
01/12/2017-  
02/28/2019



**John Campion**

Chairman, CJJ Holding



Term:  
07/25/2018-  
02/28/2022



**Kelly Flanagan**

Senior VP and CFO, Jacksonville Jaguars, LLC



Term:  
11/25/2015-  
02/28/2020



**April Green**

Chief Operating Officer, Baxter Technology



Term:  
12/01/2017-  
02/28/2021



**Camille Johnson**

President, Lee Wesley Companies



Term:  
07/25/2017-  
02/28/2020





# PART 2

What We've Done: FY2018 Financial Results

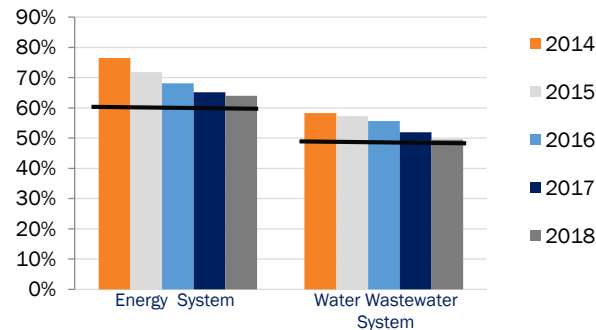


# Historical Financial Metrics

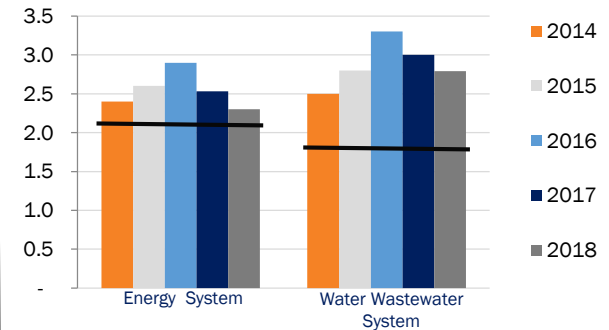
## FY2018 RESULTS DEMONSTRATE STRONG PERFORMANCE ACROSS ALL KEY FINANCIAL METRICS

- FY2018 Debt Service Coverage remains strong and provides financial flexibility to respond to industry challenges
- Debt to Asset % continues to improve and approach long-term targets
- Days Liquidity and Days Cash metrics continue to be strong and provide the ability to invest in infrastructure in both systems without new debt

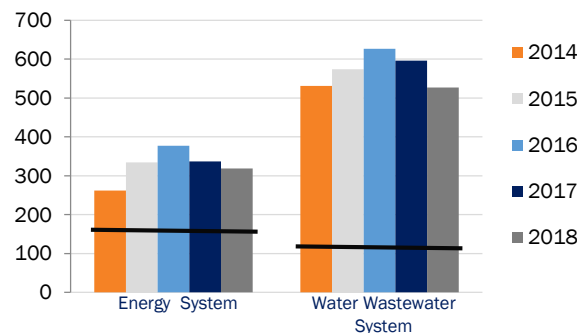
### Debt to Asset %



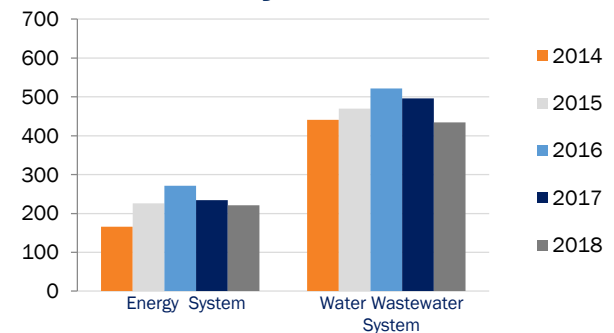
### Debt Service Coverage



### Days Liquidity



### Days Cash



— Long Term targets per JEA pricing policy

# Energy System Key Financial Metrics

## WHAT WE SAID DECEMBER 2017

- 2.2x combined debt service coverage  
Days of cash on hand: 180 days
- Days of liquidity: 280 days
- Net funded debt reduction: \$135 million
- Debt to Asset ratio: 71.8%
- Capital Expenditures: \$166 million
- Decrease in system MWh sales of (0.4%)
- Base revenue reduction of (0.4%)

## WHAT WE DID FY2018

- 2.3x combined debt service coverage
- Days of cash on hand: 221 days
- Days of liquidity: 320 days
- Net funded debt reduction: \$154 million
- Debt to Asset ratio: 71.0%
- Capital Expenditures: \$174 million
- Increase in System MWh sales of 2.6%
- Base revenue increase of 2.9%

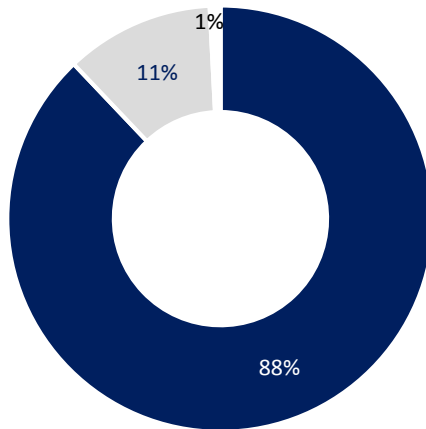


# Energy System Customer Breakdown

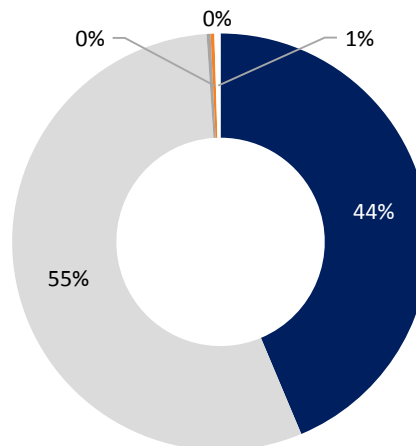
## Top Ten Customer Accounts

Account	Annual Billed	Percent of Revenue
US Navy Public Works Center	\$22,130,326	1.8
City of Jacksonville	21,660,130	1.8
CMC Steel Florida	18,726,308	1.5
WestRock CP LLC	15,236,857	1.2
Duval County School District	14,546,196	1.2
Anheuser Busch, Inc.	8,318,025	0.7
Southern Baptist Hospital of Florida Inc.	8,133,950	0.7
Publix Supermarkets Inc.	7,828,937	0.6
Johnson & Johnson Vision Care Inc.	7,343,645	0.6
Winn Dixie Stores, Inc.	7,173,720	0.6
<b>TOTAL</b>	<b>\$131,098,094</b>	<b>10.7</b>

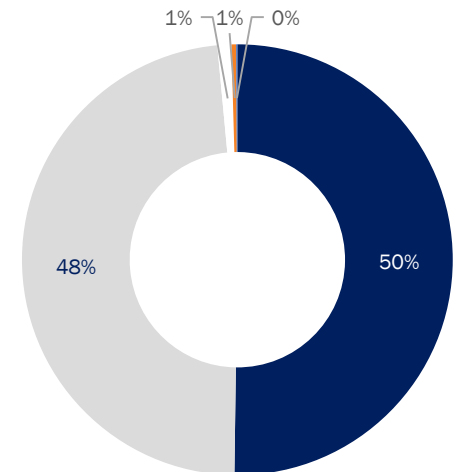
## Average Number of Customer Accounts



**Average Number of Accounts**  
Total = 466,411



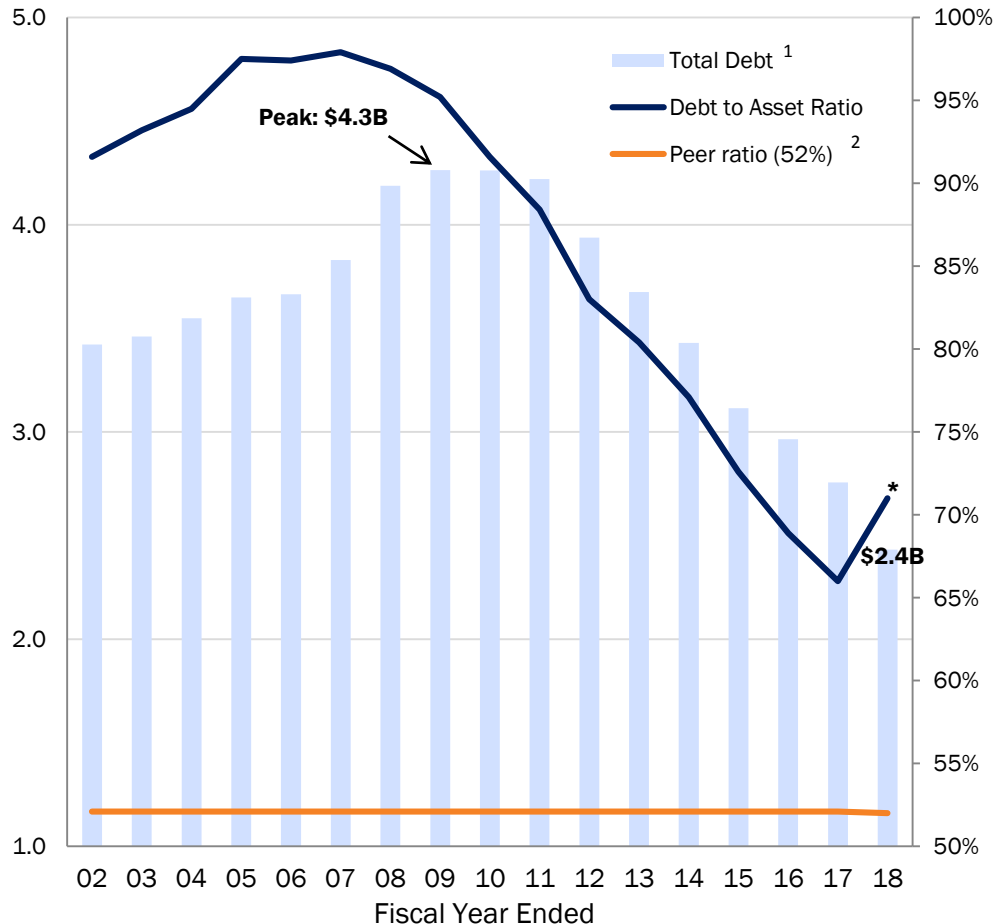
**System Sales (MWh)**  
Total = 12,399,769



**Revenues (\$ in millions)**  
Total = \$1,231

Residential
  Commercial & Industrial
  Public Street Lighting
  Sales for resale - Territorial
  Sales for resale - Off system

# Energy System Debt Management

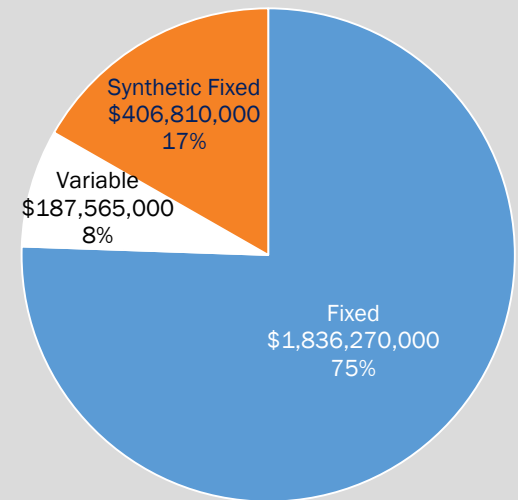


<sup>1</sup> Includes JEA, Scherer, and SJRPP

<sup>2</sup> Per Moody's Sector In-Depth Report "Public Power Medians - Sound metrics signal stability as carbon challenges loom", Sept. 2017

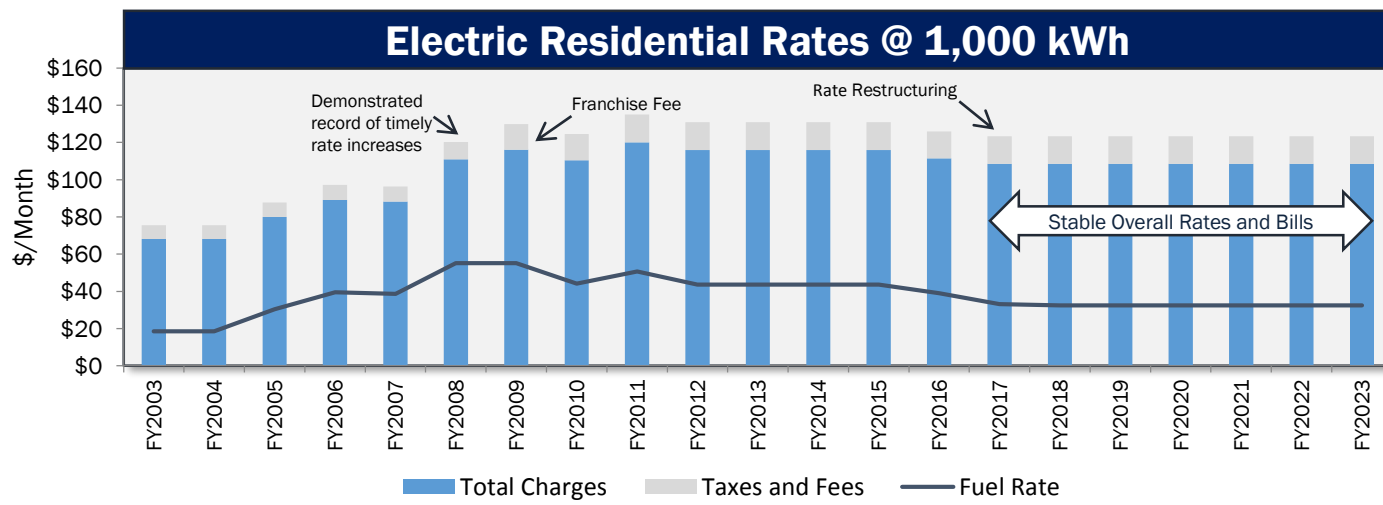
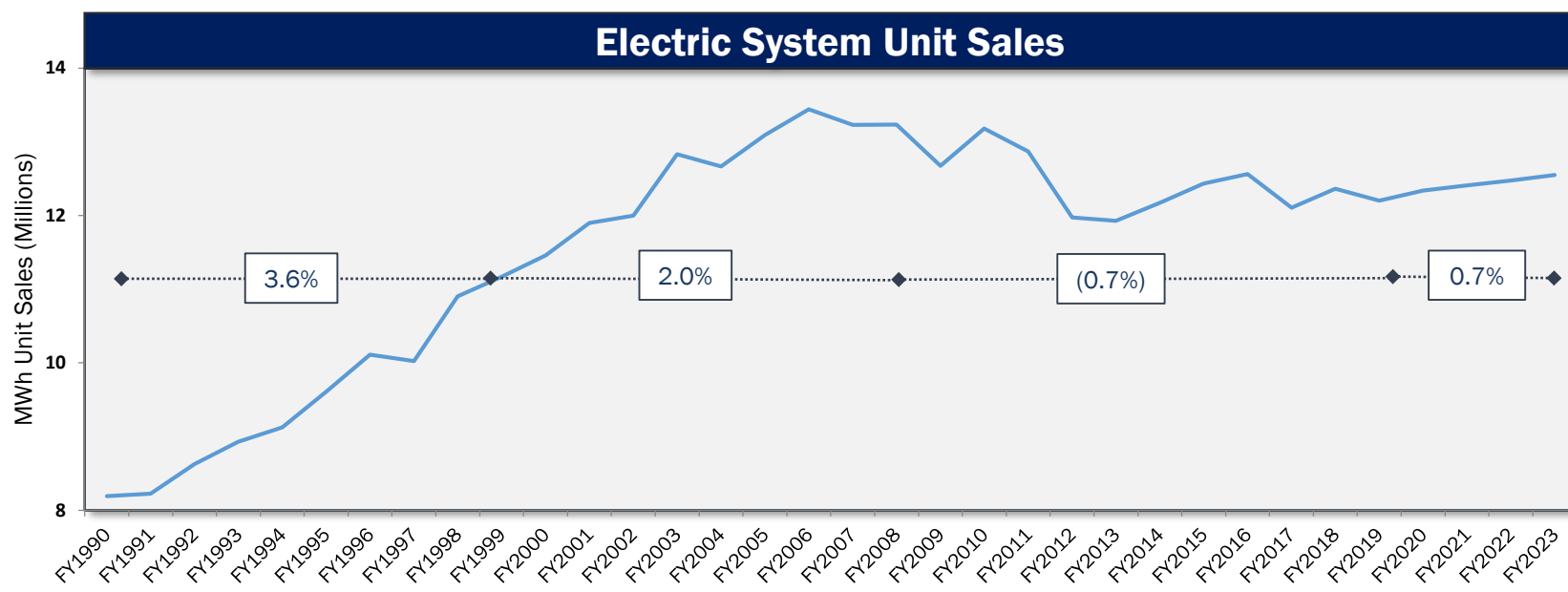
\*Increase in Debt to Asset Ratio in FY18 due to SJRPP retirement

## Debt Composition as of 9/30/18



- **\$1.9 Billion reduction in debt since peak**
- **Variable rate exposure reduced from 20% in 2008 to 8%**

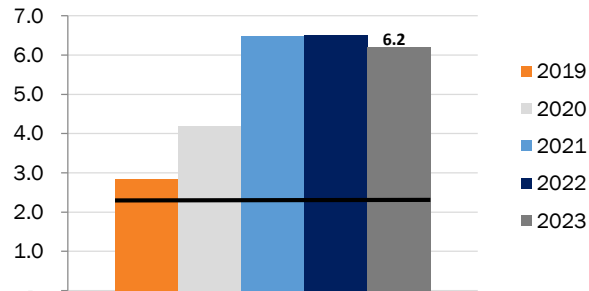
# Energy System Unit Sales and Rates



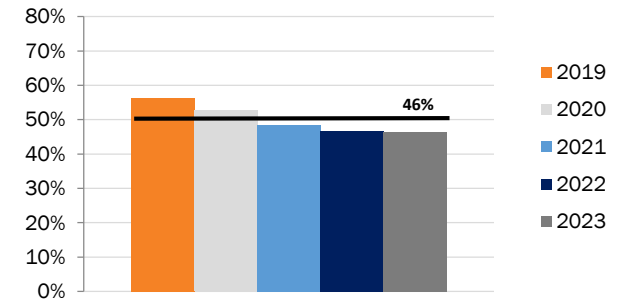
# Energy System Financial Projections

- Acceleration of debt repayment drives debt to asset ratio to 46% by 2023
- Strong debt coverage will mitigate Vogtle impacts
- Significant liquidity to continue world class operations

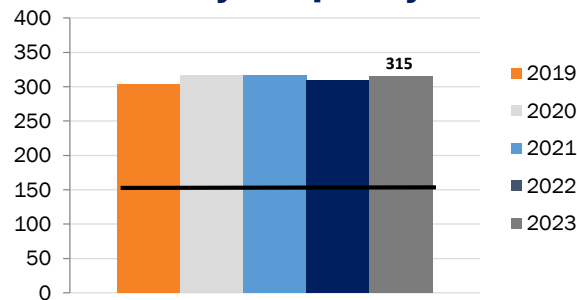
## Debt Service Coverage



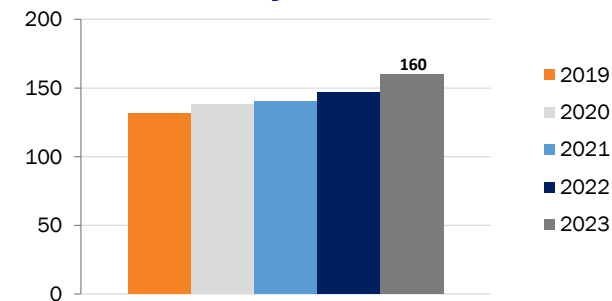
## Debt to Asset %



## Days Liquidity



## Days Cash



— Long Term targets per JEA pricing policy



# Water & Wastewater System Key Financial Metrics

## WHAT WE SAID DECEMBER 2017

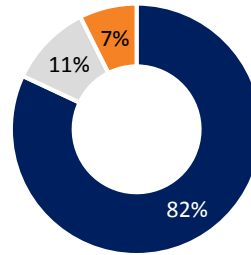
- 2.7x combined debt service coverage
- Days of cash on hand: 404 days
- Days of liquidity: 502 days
- Net funded debt reduction: \$50 million
- Debt to Asset ratio: 49.6%
- Capital Expenditures: \$215 million
- 2.0% increase in Water kgal sales
- Total system revenue decrease of (2.9%)

## WHAT WE DID FY2018

- 2.8x combined debt service coverage
- Days of cash on hand: 434 days
- Days of liquidity: 529 days
- Net funded debt reduction: \$70 million
- Debt to Asset ratio: 49.5%
- Capital Expenditures: \$199 million
- (2.8%) decrease in Water kgal sales
- Total system revenue decrease of (3.8%)

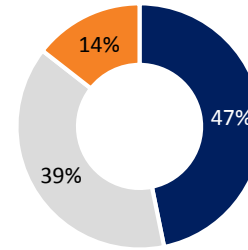
## WATER SYSTEM CUSTOMER BREAKDOWN

Ten Largest Customer Accounts	Annual \$ Billed	Percent of Revenues
City of Jacksonville	\$2,215,500	1.2
Duval County School District	1,149,128	0.6
St. Johns County Utility	771,120	0.4
Southern Baptist Hospital of Florida Inc.	540,573	0.3
The American Bottling Company	405,992	0.2
American Homes for Rent LP	394,243	0.2
St Vincents Health System Inc.	388,147	0.2
DR Horton, Inc. Jacksonville	357,536	0.2
Mayo Clinic Jacksonville	322,921	0.2
Jacksonville Housing Authority	314,430	0.2
<b>TOTAL</b>	<b>6,859,588</b>	<b>3.7</b>



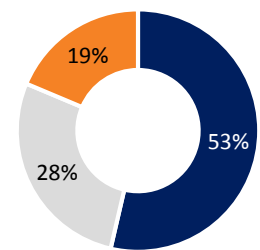
Average # of Accounts  
Total = 348,159

Residential



System Sales (kgal)  
Total = 36,186,559

Commercial & Industrial



Revenues (\$ in millions)  
Total = \$172

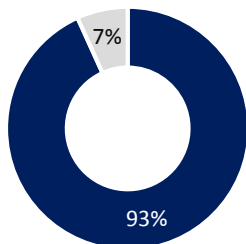
Irrigation

### Average Number of Customer Accounts



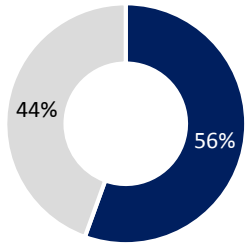
## SEWER SYSTEM CUSTOMER BREAKDOWN

### Average Number of Customer Accounts



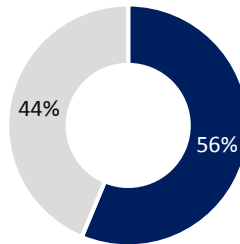
Average # of Accounts  
Total = 270,871

Residential



System Sales (kgal)  
Total = 26,340,622

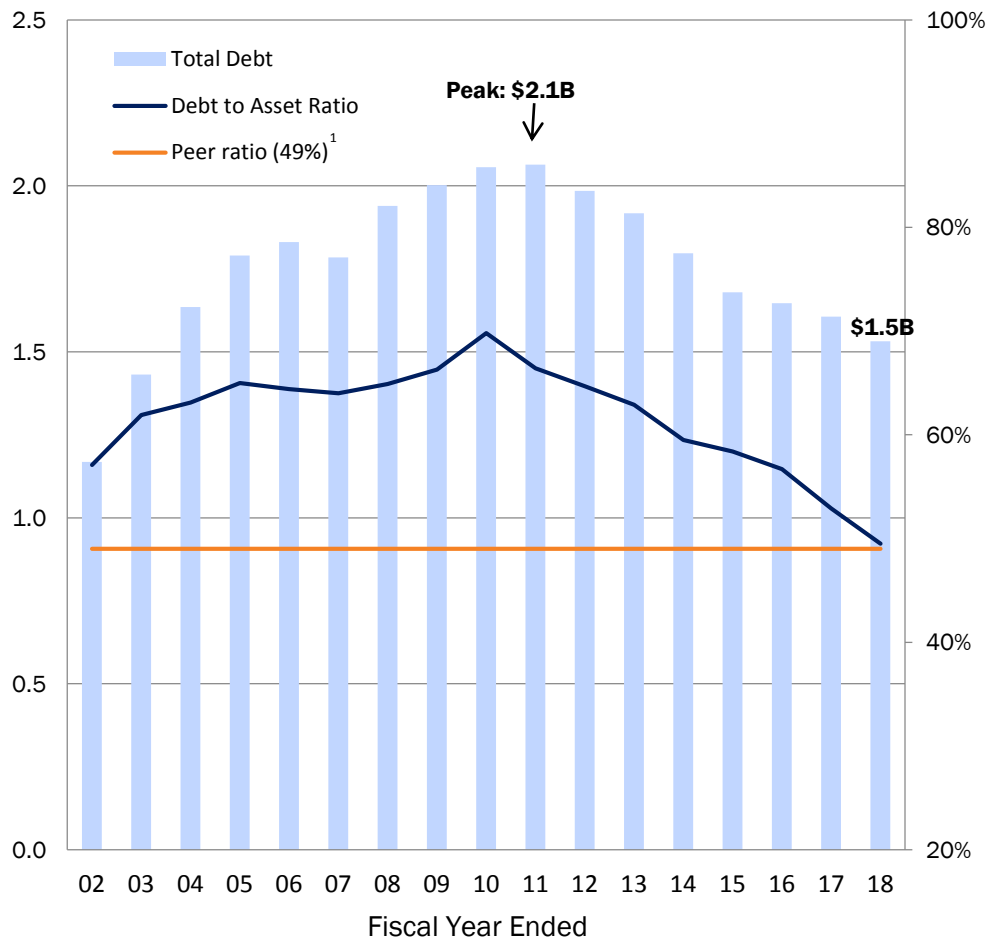
Commercial & Industrial



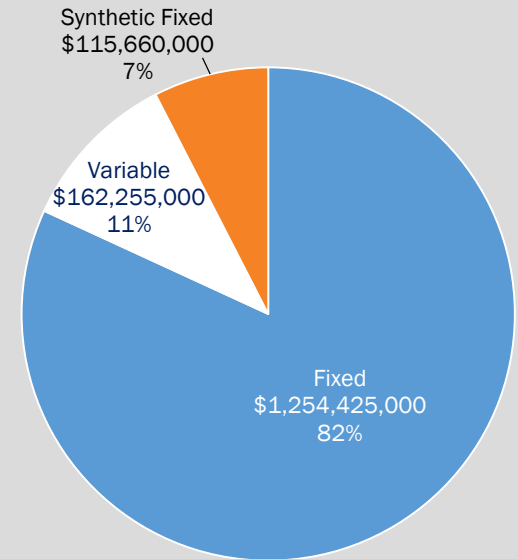
Revenues (\$ in millions)  
Total = \$247

Ten Largest Customer Accounts	Annual \$ Billed	Percent of Revenues
City of Jacksonville	\$2,637,060	1.1
Duval County School District	2,177,213	0.9
St. Johns County Utility	1,294,095	0.5
The American Bottling Company	1,106,595	0.4
WWF Operating Company	971,058	0.4
St Vincents Health System Inc.	957,243	0.4
Southern Baptist Hospital of Florida, Inc.	933,540	0.4
Mayo Clinic Jacksonville	869,928	0.4
Symrise, Inc.	830,531	0.3
American Home Portfolio LLC	824,016	0.3
<b>TOTAL</b>	<b>\$12,601,279</b>	<b>5.1</b>

# Water & Sewer System Debt Management



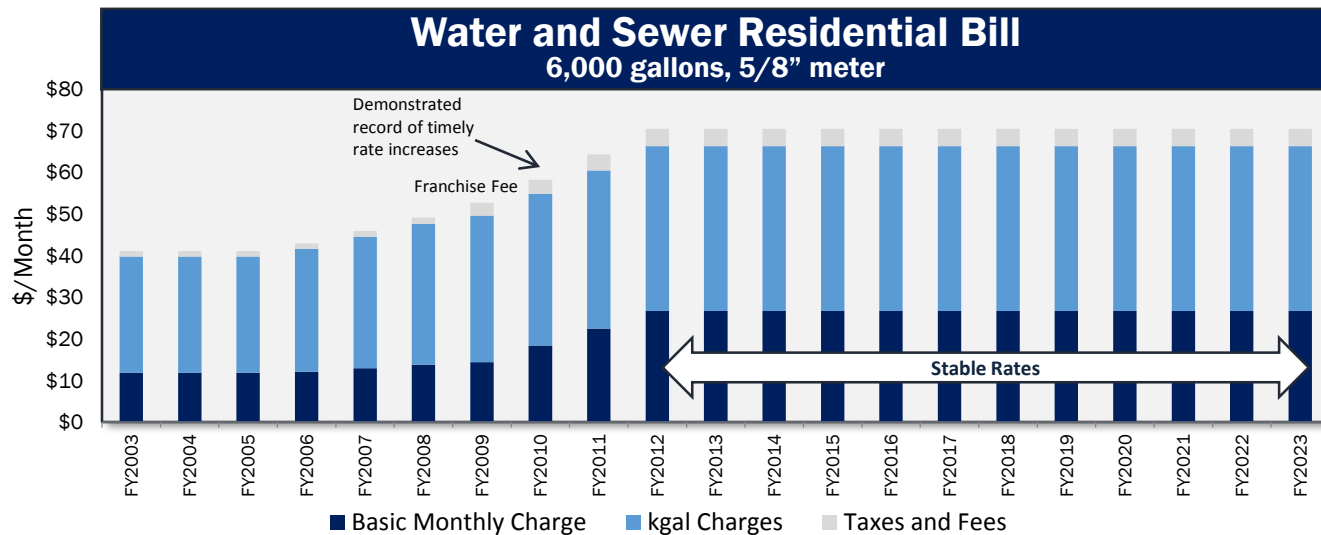
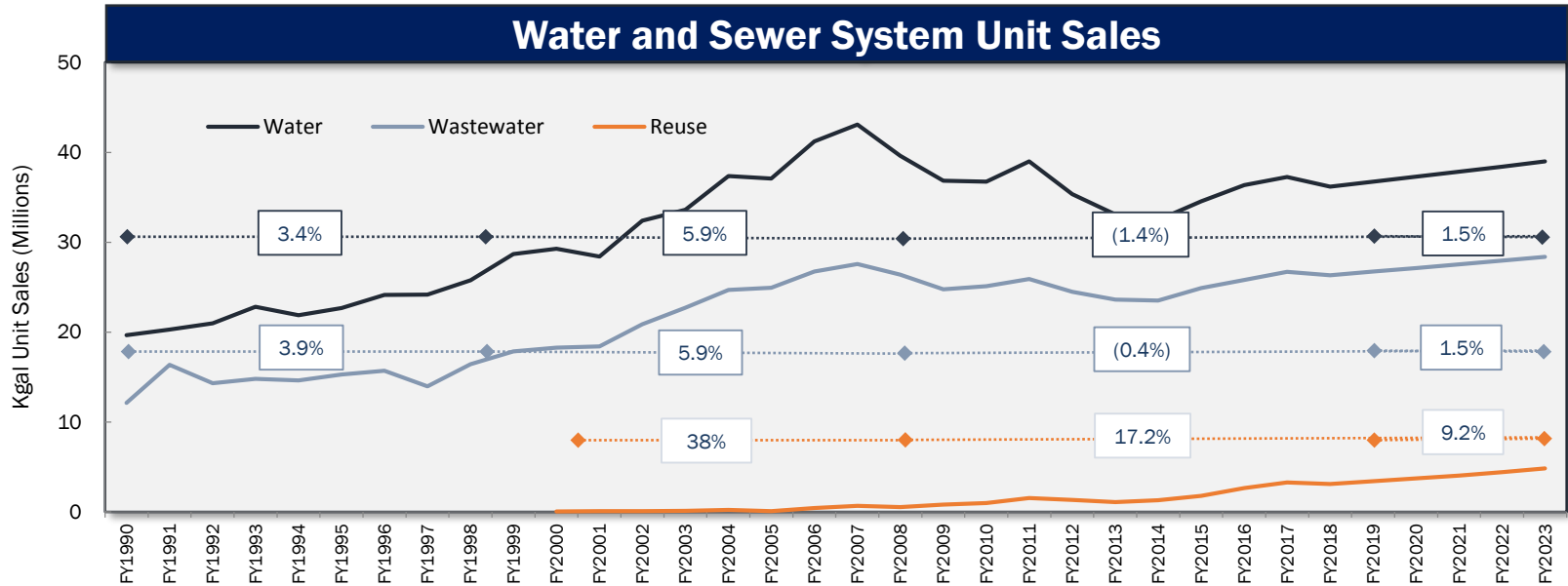
## Debt Composition as of 9/30/18



- **Over \$532 million reduction in debt since peak**
- **Variable rate exposure reduced from 18% in 2009 to 11%**

<sup>1</sup> Calculated from Moody's Municipal Financial Ratio Analysis database of 209 Aa rated public water-sewer utilities, Jan. 10, 2017

# Water & Sewer System Unit Sales and Rates

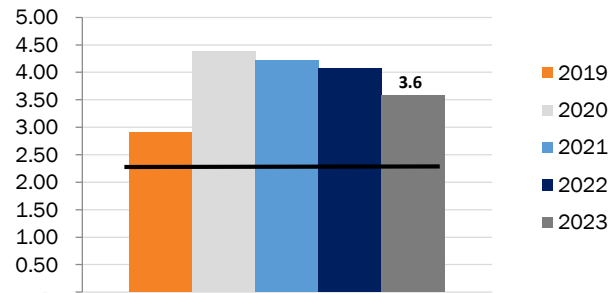




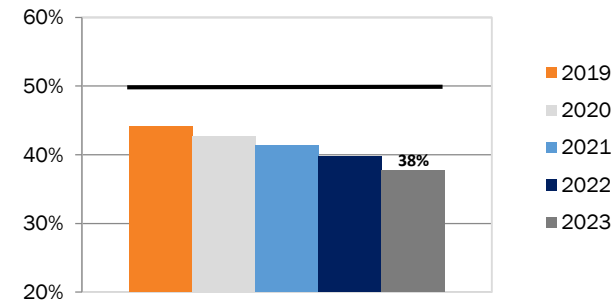
# Water & Sewer System Financial Projections

- Debt to Asset ratio below 40% by 2023
- \$1 billion capital plan with the ability to cash fund
- AAA financial health
- Opportunity to begin managing to target capital structure

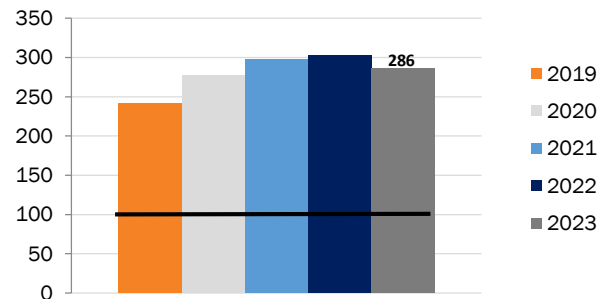
## Debt Service Coverage



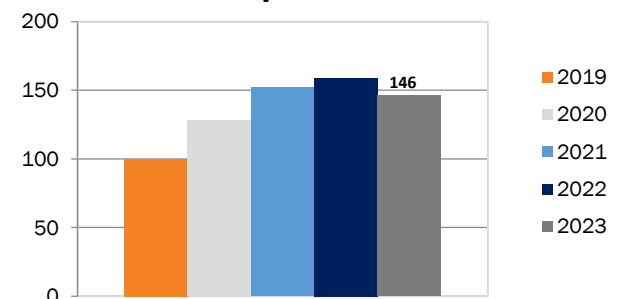
## Debt to Asset %



## Days Liquidity



## Days Cash



— Long Term targets per JEA pricing policy



# PART 3.....

## Where We Are Going: A New Dawn

# New Strategic Framework



Our mission will be guided by and evaluated against how well we as employees drive these four basic corporate measures of JEA's value:

**Customer Value**  
**Financial Value**  
**Community Impact Value**  
**Environmental Value**

# Guiding Principles

## Accelerating Utility Innovation

### **OUR VISION**

Improve lives by accelerating innovation

### **OUR MISSION**

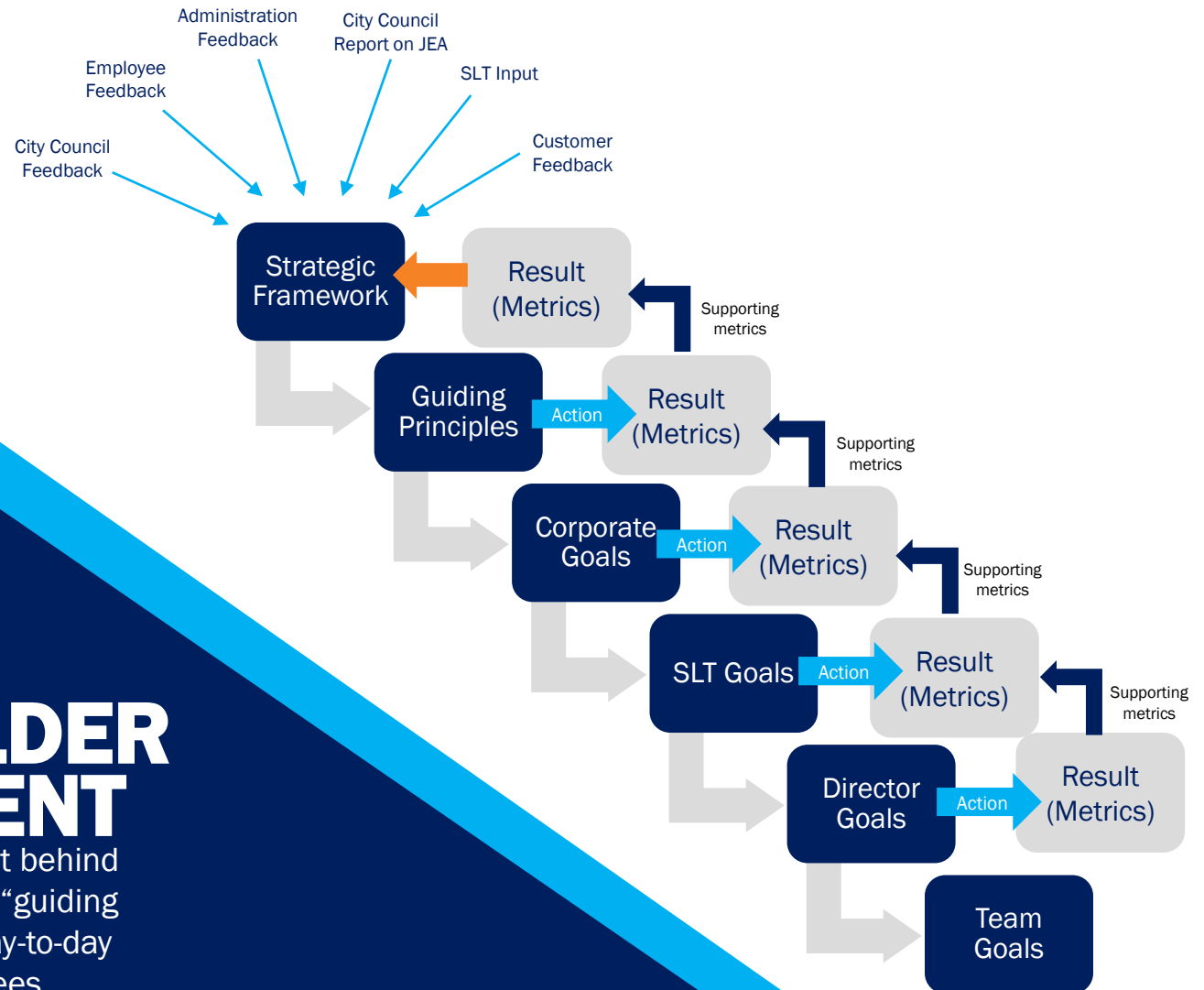
Provide the best service by becoming the center of our customers' energy and water experience

### **OUR CORE COMPETENCIES**

- Deliver an unparalleled customer experience
- Work together to elevate the entire team
- Innovate and evolve to match our customers' needs with market trends

# STAKEHOLDER ALIGNMENT

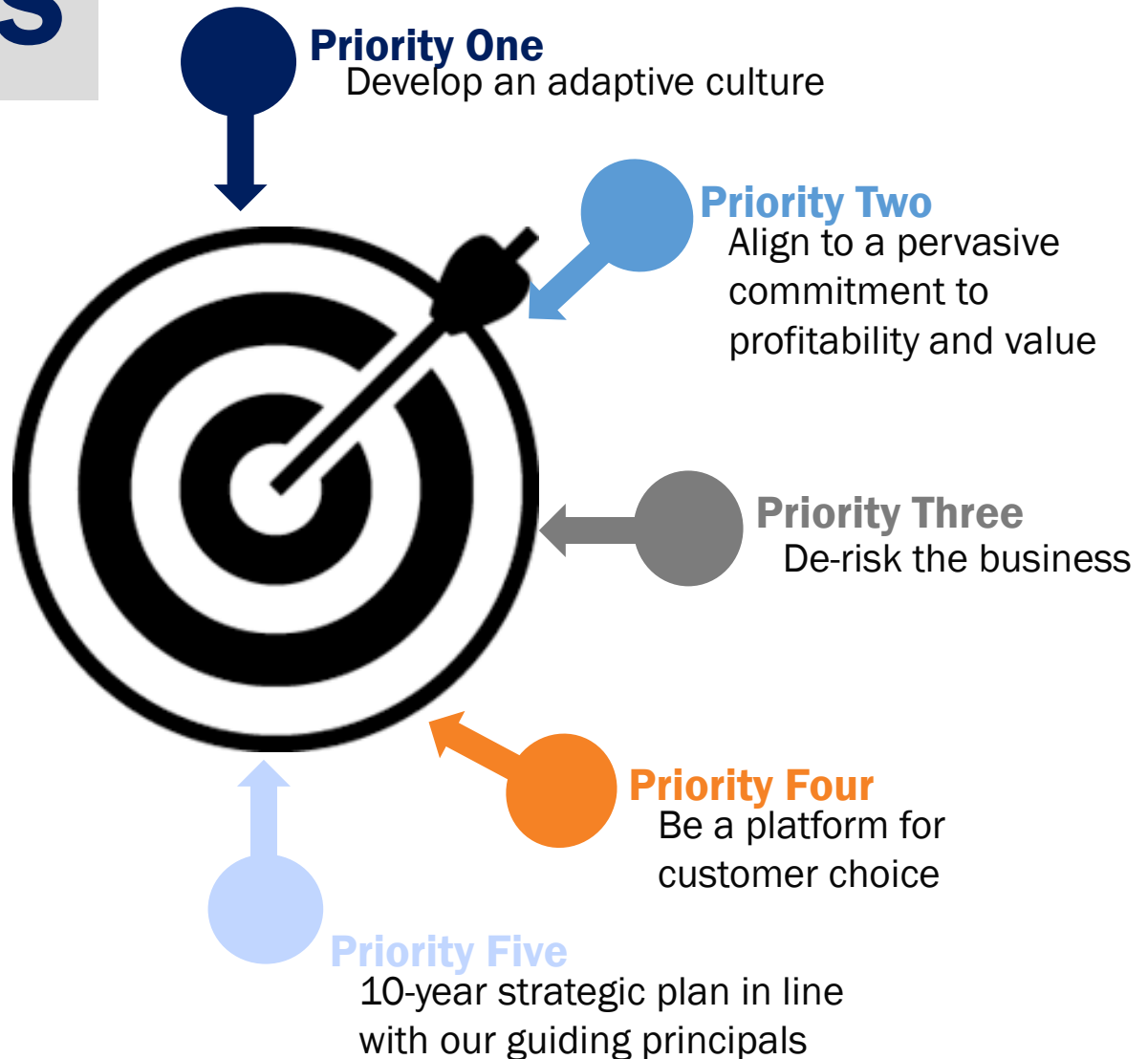
Basic logic of alignment behind “strategic framework,” “guiding principles,” through day-to-day actions of employees.





# FY19 GOALS

**Our Five  
Focus Areas  
That Are  
Necessary  
For Future  
Success**



# Priority One:

Develop an adaptive culture.

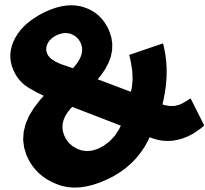
# Our Cultural Values

Safety  
Service  
Growth<sup>2</sup>  
Accountability  
Integrity  
*Ideas*

**STOP**

**Working Not To Fail**

A culture where individuals are motivated by risk aversion striving not to fail rather than to succeed



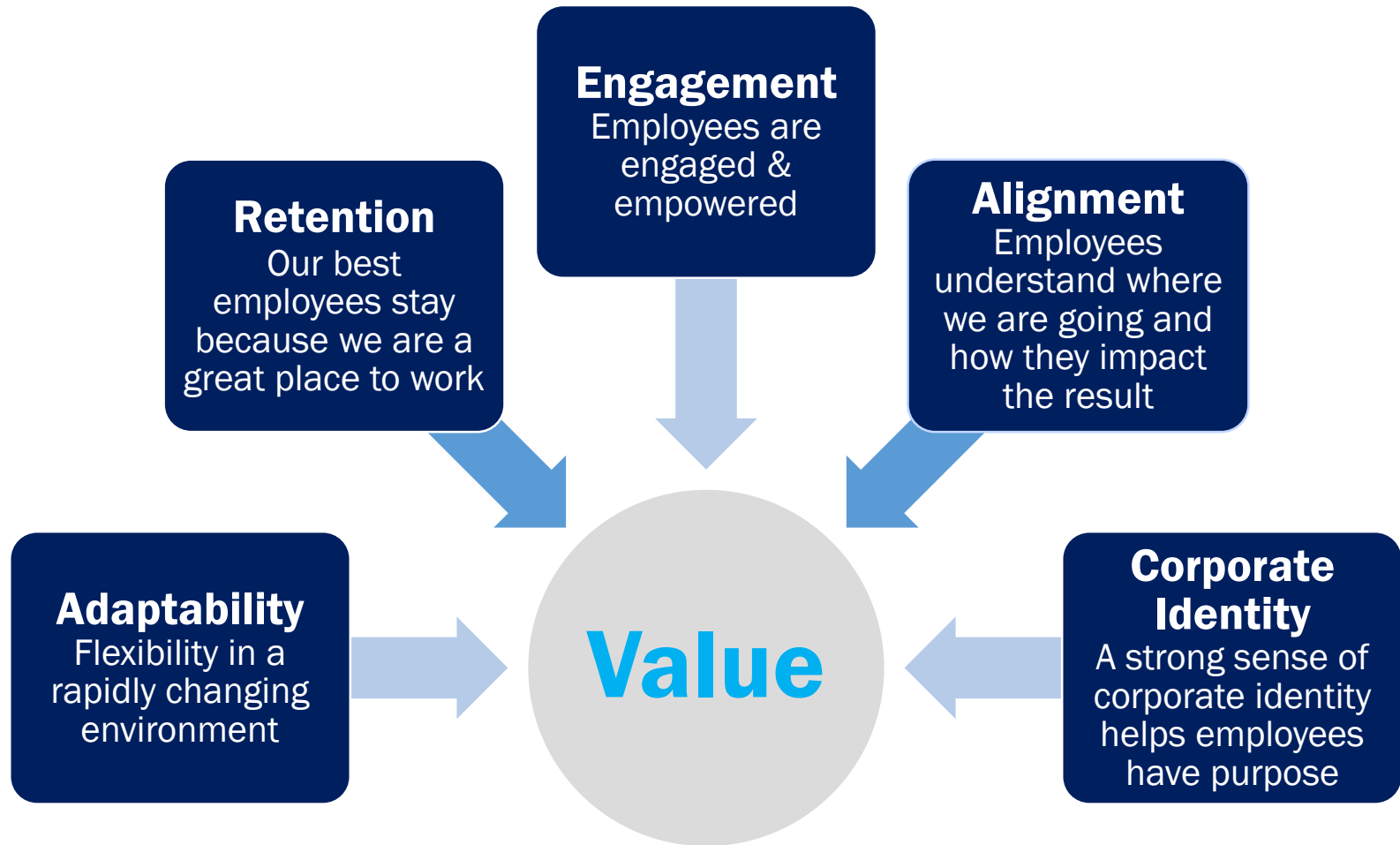
**START**

**Driving Towards Success**

Be willing to take appropriate and calculated risks to achieve extraordinary results

**Our Mantra  
To Realize An  
Adaptive  
Culture**

# Why An Adaptive Culture Matters





# Priority Two:

Align to a pervasive commitment to  
profitability & value.

**Our fundamental goal is to maximize each of our corporate measures of value both now & in the future**

▶ **1 Customer Value**

What a customer expects to get in exchange for the price they pay

▶ **2 Financial Value**

The monetary value and risk profile, both today and tomorrow, of JEA as it relates to the city

▶ **3 Environmental Value**

Ensuring a sustainable environment for future generations

▶ **4 Community Impact Value**

Improving the quality of life through innovative and cost-effective service offerings, employee volunteerism and ambassadorship, relevant and timely communications, and support of economic development and job growth throughout JEA's service territory; foster a collaborative and respectful corporate culture that provides exceptional employee value to equip the JEA team to deliver outstanding service and value to its community

# Priority Three:

De-risk the business.

- Reevaluate our risks
- Develop the STAR plan
- Hedge our fuel expenses
- Strengthen our PPAs
- Extend our city contribution plan

# Enterprise Risk Management



**JEA's Enterprise Risk Management (ERM) program identifies, assesses, measures, and actively manages risk, including mitigation strategies and actions.**

**Our methodology has been modified to better prioritize risks, relative to each other, and better assess reputation impact of a risk event.**

**We have developed a new scoring metric and updated our tier one risks.**



# ERM Corporate Risk Heat Map Scoring

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

Likelihood	Almost Certain >90	5	5	10	15	20	25
	Likely 65-90%	4	4	8	12	16	20
	Possible 35-65%	3	3	6	9	12	15
	Unlikely 5-35%	2	2	4	6	8	10
	Rare <5%	1	1	2	3	4	5
			1	2	3	4	5
			Minor	Moderate	Significant	Major	Severe
			Impact				
X2							
Financial & Reputational Risk							

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

# Our New Tier 1 Risks

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

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

# Rate Restructuring Review

## What we said we'd do back in Fall 2016

1. JEA will pay down \$190 million of debt early and customers will realize long-term savings of \$100 million.
2. JEA will promote bill stability for customers.

## What we actually did after the 2016 restructuring

1. In February 2017, JEA made accelerated debt payments of \$157 million and \$40 million in 2018, realizing an average debt service savings of \$10 million annually with a total savings of over \$88 million through 2025.
2. On December 1, 2016 JEA lowered electric bills to over 50,000 businesses in Northeast Florida. The lower electric rates have remained stable for two years and counting.



# **Strategic & Timely Asset Realignment (STAR) Plan**

**JEA's Financial  
Strength Revised**

## **Approved Plan that increases operating efficiency and reduces corporate risk includes:**

- Increased revolver by \$200 million at same pricing / terms and conditions ✓
- Maintaining solid AA financial credit metrics ✓
- Increase cash flow by an average of ~\$80 million annually through 2023
- Pay off ~\$1 billion of debt by 2023 – all debt maturing before 2028
- Cash funding ~\$1.9 billion in CAPEX for next 5 years
- Increase CAPEX by over 40% over the next 5 years vs. the last 5 years
- No projected base rate increases necessary to execute on plan



# STAR Plan Projections



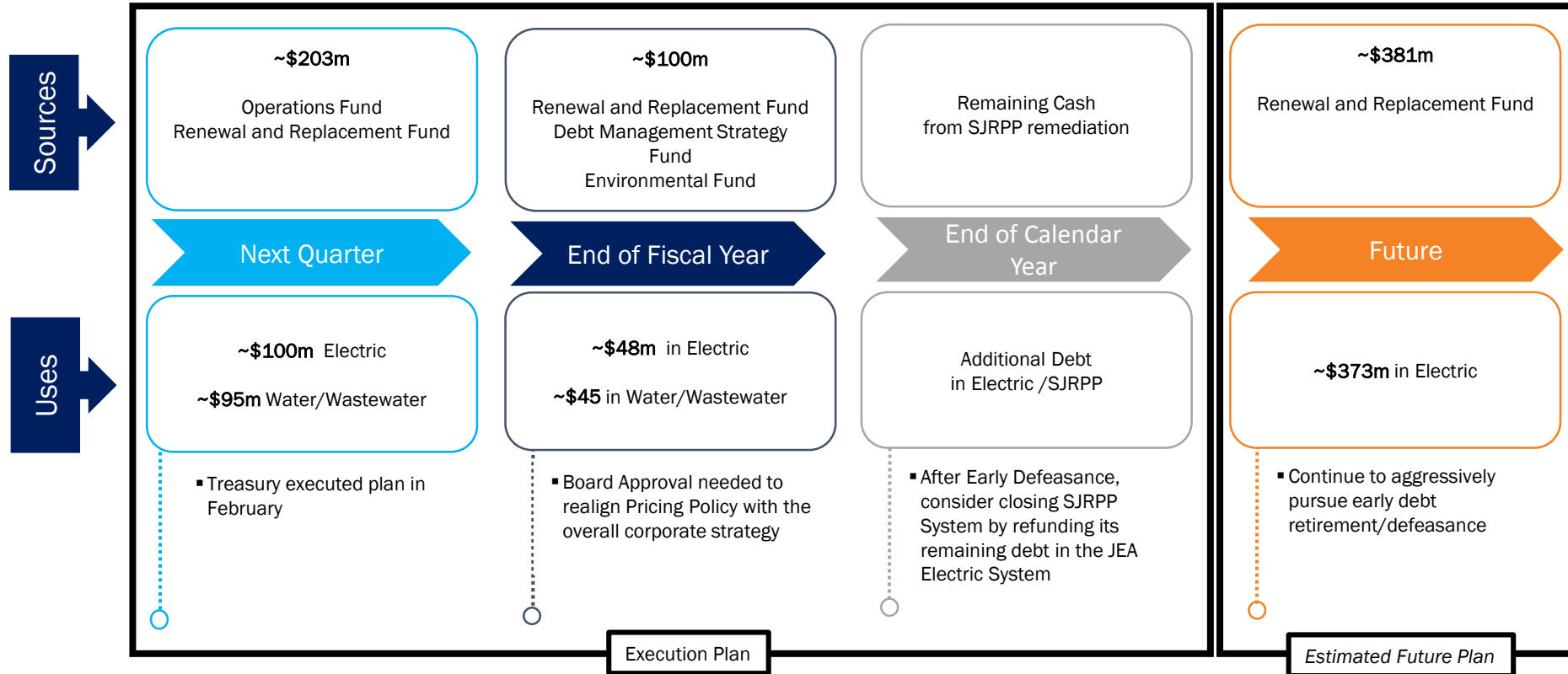
- Repay over \$465 million in debt in 2019 and over \$1 billion over the next 5 years between both systems
- Continue to invest \$1.9 billion in the system over the next 5 years with no new debt and no base rate increases
- Electric debt to capitalization drops to 46% and water debt to capitalization drops to 35%
- Lowest electric debt in 40 years, lowest water debt in 20 years
- Demonstrate ability and willingness to pay
- Maintain solid AA financial credit metrics

(\$ millions)	2018	2019	2020	2021	2022	2023
Electric Debt Acceleration	\$0	\$148	\$42	\$163	\$107	\$61
Water Debt Acceleration	\$0	\$140	\$0	\$0	\$0	\$0
Cumulative Debt Acceleration	\$0	\$288	\$330	\$493	\$600	\$661
Operating FCF before CAPEX	\$418	\$496	\$505	\$607	\$562	\$535
CAPEX	\$373	\$475	\$446	\$356	\$328	\$332
Electric Debt Remaining <sup>1</sup>	\$1,955	\$1,689	\$1,583	\$1,402	\$1,285	\$1,217
Water Debt Remaining <sup>1</sup>	\$1,378	\$1,217	\$1,199	\$1,179	\$1,155	\$1,111
Total Debt	\$3,333	\$2,906	\$2,782	\$2,581	\$2,440	\$2,328
Debt to Capitalization (E/WWW)	65%/44%	58%/41%	55%/40%	49%/38%	47%/37%	46%/35%
Days Liquidity (E/WWW)	319/589	303/241	317/277	317/297	309/302	315/286
Base Rate Changes	0%	0%	0%	0%	0%	0%

<sup>1</sup> Net Funded Debt. Net Funded Debt is equal to bonds payable plus bonds due within one year less debt service reserve fund less debt service sinking fund plus accrued interest payable

# STAR Plan

## EARLY DEBT RETIREMENT PHASES



# STAR Plan

## Energy Financial Metrics

Metrics	FY18	Phase 2 Δ vs FY18	End of FY19	Phase 3 Δ vs FY18	End of FY23
Debt Service Coverage	2.3x	0.5x	2.8x	3.7x	6.5x
Fixed Charge Coverage	1.7x	0.4x	2.1x	(0.1x)	2.0x
Days of Cash	221	(90)	131	29	160
Days of Liquidity	319	(16)	303	12	315
Debt to Capitalization	65%	(7%)	58%	(12%)	46%

Balance Sheet (\$millions)	FY18	Phase 2 Δ vs FY18	End of FY19	Phase 3 Δ vs FY18	End of FY23
Total Assets	\$4,238	(\$233)	\$4,005	(\$643)	\$3,595
Total Debt Outstanding	\$2,150	(\$279)	\$1,871	(\$877)	\$1,273
Total Other Liabilities	\$1,021	(\$84)	\$937	(\$129)	\$892
Total Net Position	\$1,067	\$130	\$1,197	\$363	\$1,430

# STAR Plan Water & Wastewater Financial Metrics

Metrics	FY18	Phase 2 Δ vs FY18	End of FY19	Phase 3 Δ vs FY18	End of FY23
Debt Service Coverage	2.8x	0.1x	2.9x	0.8x	3.6x
Fixed Charge Coverage	2.6x	0x	2.6x	0.7x	3.3x
Days of Cash	434	(334)	100	(288)	146
Days of Liquidity	527	(286)	241	(241)	286
Debt to Capitalization	44%	(3%)	41%	(9%)	35%

Balance Sheet (\$millions)	FY18	Phase 2 Δ vs FY18	End of FY19	Phase 3 Δ vs FY18	End of FY23
Total Assets	\$3,580	(\$161)	\$3,419	(\$29)	\$3,551
Total Debt Outstanding	\$1,529	(\$192)	\$1,337	(\$308)	\$1,221
Total Other Liabilities	\$466	(\$32)	\$434	(\$90)	\$376
Total Net Position	\$1,585	\$63	\$1,648	\$369	\$1,954

# GAS HEDGING

## Current Hedges

2019 Gas Hedges in place for  
20,000 MMBTU/day April –  
December.

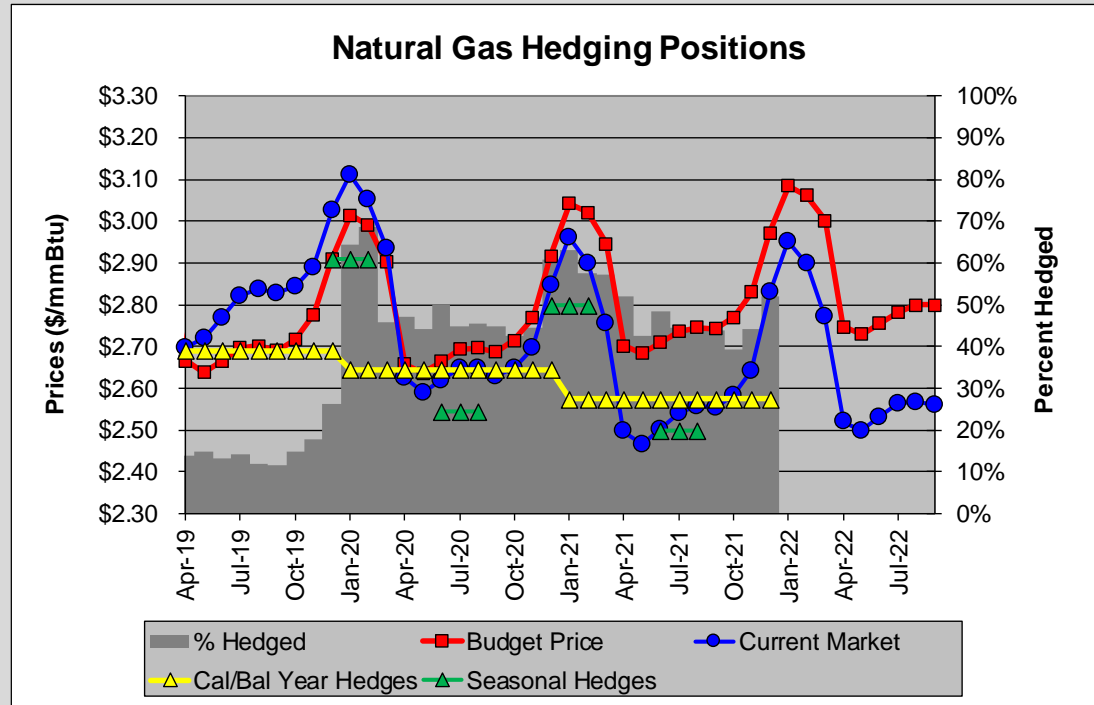
2020 and 2021 Gas Hedges in  
place for 60,000 MMBTU/day  
Calendar Strips and 10,000  
MMBTU/day Winter and Summer.

Average price:

2019 – \$2.702/MMBTU

2020 – \$2.649/MMBTU

2021 – \$2.577/MMBTU





# GAS PREPAY PARTICIPATION PARAMETERS

In December 2018 the JEA Board delegated authority to the Managing Director and CEO to allow for the execution of gas supply agreements related to prepayment projects under certain key parameters:

- ✓ Term of the gas supply agreement shall not exceed 30 years
- ✓ Minimum savings of no less than 20 cents per MMBtu for all agreements in excess of 5 years
- ✓ Maximum committed volumes not to exceed 50% of estimated annual throughput
- ✓ JEA is obligated only if such natural gas supplies are delivered

**JEA expects to enter into gas supply agreements with the Municipal Gas Authority of Georgia to purchase 12,000 MMBtus/day of pre-paid natural gas, resulting in a total savings of \$6.5 million over the next five years**

*Participation in gas supply agreements associated with prepayment projects subject to certain thresholds*

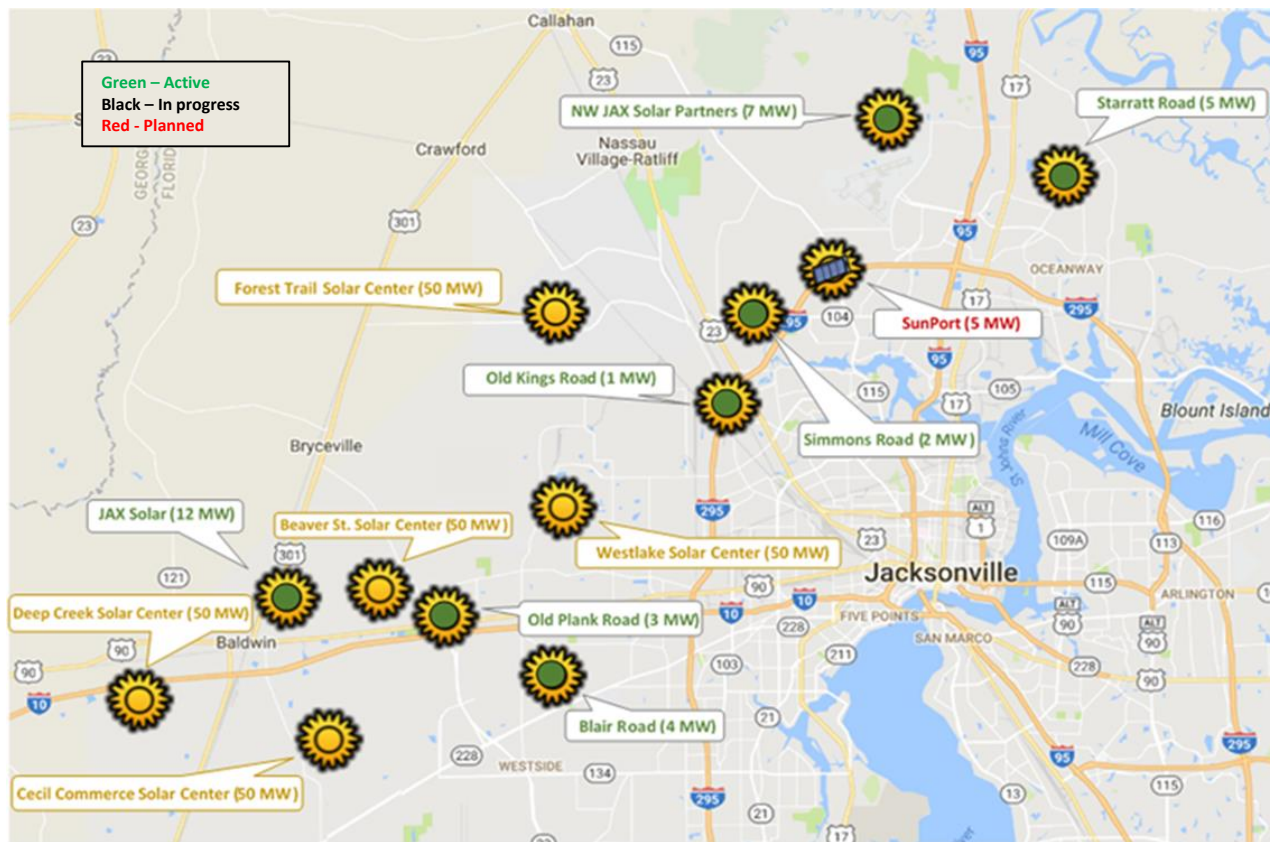
# JEA Current & Future PV Solar Sites

## JEA IS PURSUING A SUBSTANTIAL INCREASE IN SOLAR GENERATION


We have contracted to add up to 250 MW of universal solar by 2022, in addition to 34 MW installed, and 5 MW currently in progress making Jacksonville the largest solar city in the U.S.

### WHAT THIS LOOKS LIKE:

- New sites, land owned by JEA
- Reduces exposure to fossil fuel volatility
- PPA prices below current fuel rate with no escalator providing a 20+ year fuel hedge



# Contribution Agreement Extension

- 
- Extends the terms & conditions of the current agreement through 2023
  - Contribution rate stays stable at a rate of prior year plus 1%
  - Continue JEA's contribution to COJ of 30.34 metric tons in water quality credits plus an additional 13.6 metric tons in water quality credits each year in perpetuity (the additional 13.6 metric tons comes from the decommissioning of SJRPP)
  - Provide an additional \$15 million contribution to the COJ/JEA Septic Tank Phase Out Program. This brings the total COJ and JEA contribution towards the septic tank phase out program to over \$45 million since 2016.
  - Provide a one-time \$155,000 contribution for river level monitoring equipment that was damaged during recent hurricanes.
  - City Council approved on February 12, 2019
  - To be executed February 2019

**This creates a stable operating environment through 2023**

# Priority Four:

Be a platform for customer choice.

# Become a platform for customer choice: Demand Rate Study

## Our First Step:

Create a pricing platform for the future that provides *Revenue Stability* that delivers positive *Customer Impact* while promoting efficient *System Utilization*.

We believe our cost of service should align with our customers use of the electric system. As they reduce usage, we can equally reduce costs to match.

## What We've Learned So Far:

- Demand pricing is less impacted by weather and more stable than kWh
- Customers perceive more and longer demand intervals to be more fair
- Customers like the opportunity to save by avoiding peak periods
- Customers believe that technology (information and control) is needed to manage usage effectively

Jan 2014  
Rate Design  
Working Group

April 2016  
JEA Demand  
Rate Opt-In  
Pilot

June 2018  
Alternate Rate  
Design  
Analysis

Aug 2018  
Focus Group  
Test

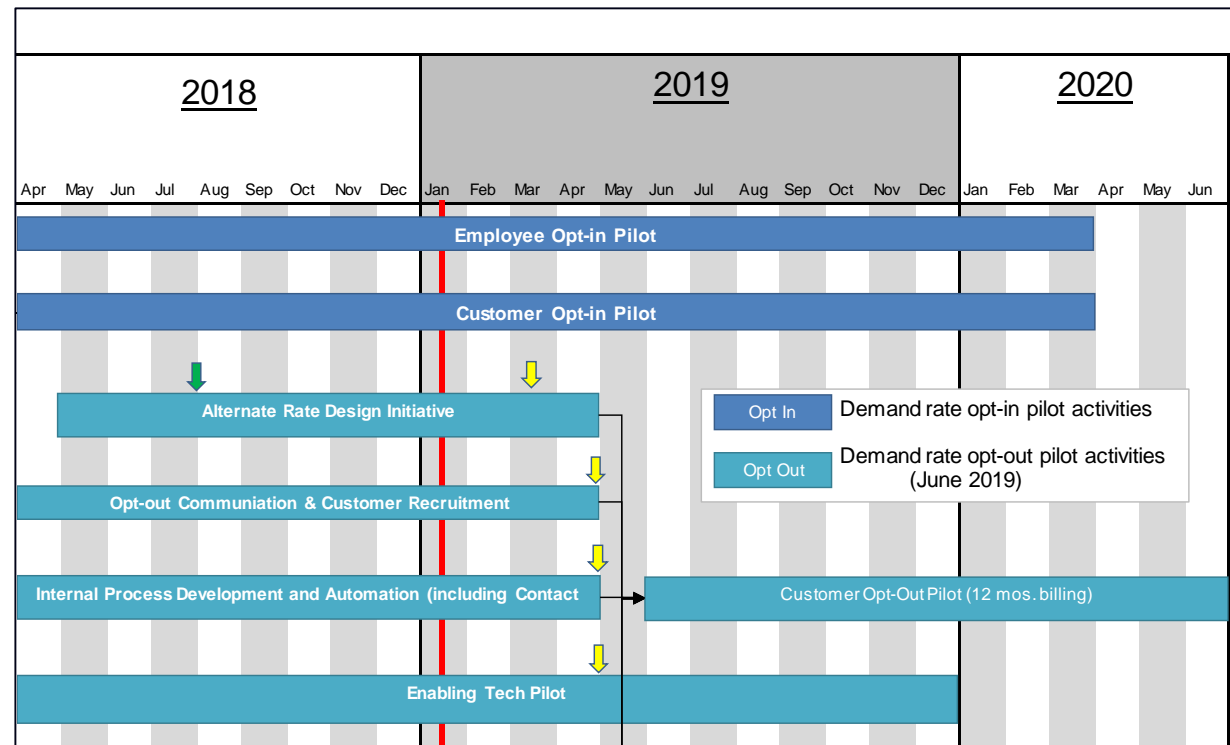
Nov 2018  
Weather  
Stress Test



# Demand Program Pilot Timeline

## Opt-Out Demand Pilot Goals

- Study how customer behavior change impacts revenue collected and peak generation
- Test and fine tune...
  - Communications (i.e., alerts), delivery method, and timing preferences to customers
  - Customer support responses using segmentation and call center feedback
  - Enabling technology offering
- Evaluate impacts to low income segments
- Review rate robustness to Distributive Energy Resources and technology innovations



# Enabling Technology

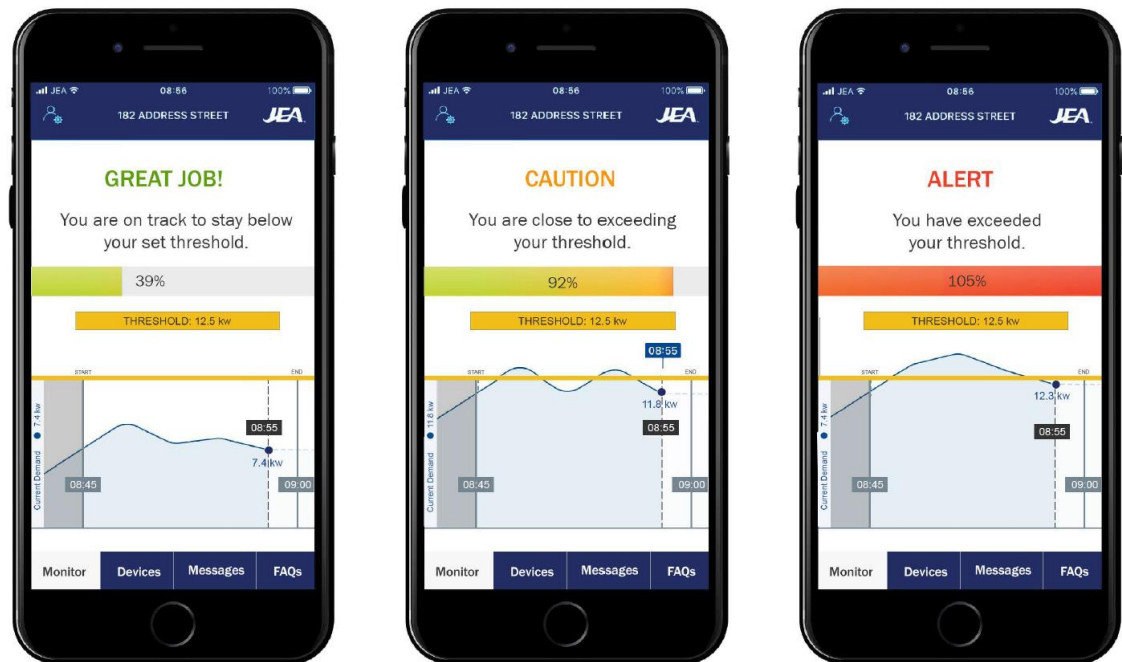
## Customer Home Energy Management Tool Pilot

We are in the midst of conducting research and development into the enabling technology we feel is necessary to support the customer in a demand pricing scenario.

Our current 250 customer and employee pilot is testing a state-of-the-art Customer Home Energy Management (HEM) tool.

Our HEM technology includes:

- Cellular gateway that provides 1 minute data off the meter
- A JEA app that will monitor energy usage and provide threshold alerts
- Appliance (HVAC and Water Heater) control
  - Fun gamification that encourages education thru entertainment



# Become a platform for customer choice: Electrification

## What is electrification?

**Electrification is the shift from any non-electric source of energy to electricity at the point of final consumption.**

- National Renewable Energy Lab

## How is it beneficial?

**Beneficial Electrification requires that it be cost-effective for JEA, good for all customers (whether they participate in the program or not), and good or neutral for the environment.**

-ICF

### Transportation

- Public Charging Stations
  - Electric Vehicles
  - Fleet Electrification



### Residential

- In-Home Charging Stations
  - Air-source Heat Pumps
- Lawn maintenance equipment (mower, trimmer, hedger, blower, etc.)



### Aviation

- Pushbacks
  - Belt Loaders
  - Baggage Tugs



### Commercial and Industrial

- Heat recovery chillers
- Replace pneumatic equipment with electric
- Install induction furnaces for non-ferrous metal melting



### Heavy Duty Off-Road

- Replace propane/gas forklifts with electric
- Eliminate Truck Stop idling
- Convert rail yard cargo handling equipment to electric



### Agriculture

- Retrofit Diesel Irrigation Pumps to Electric
- Indoor agriculture (controlled lighting, and space-conditioning)
- Infrared drying and peeling of vegetables



# Electrification Programs

## On-Road Program Incentives on new electric vehicles

### Components

- ▶ Strategic partnership with Transportation Planning Organization (TPO) and Drive Electric Florida
- ▶ EV Educational Forums
- ▶ Charging Infrastructures Support
- ▶ Trusted Advisor
- ▶ Promotional outreach



New Electric Vehicle	JEA Incentive
Battery size less than 15kWh	\$500
Battery size of 15kWh or higher	\$1,500

# Electrification Programs

## Non-Road Electro-technology (NRE) Program

**Conversion of commercial and industrial diesel/propane equipment to electric**

### Components

- ▶ Direct business to business customer analysis and sales
- ▶ Marketing
- ▶ Vendor training
- ▶ Consultation with JEA customers
- ▶ Technical support
- ▶ Financial analysis
- ▶ QA/QC inspections

Electro-technology	JEA Incentive
Forklifts	\$300
Airport Ground Support Equipment	\$100-\$600
Truck Refrigeration Units	\$200
Heavy-Duty Truck Stop	\$200
Cranes	\$15,000-\$75,000
Golf Carts	\$50
Welders	\$500



There exists an opportunity to increase the scale and scope of both the on-road and non-road program. By adding additional technologies, program design elements, and budget, JEA may be able to:

- Significantly increase the revenue and values from the programs
- Put downward pressure on rates
- Provide a more flexible and efficient JEA load shape
- Significantly reduce JEA's (and its customers') environmental footprint

JEA is currently conducting a study with ICF to quantify the costs and risks of pursuing this opportunity. The study will be complete in 2019.

## **JEA's Electrification Future**

# Become a platform for customer choice: Integrated Water Resource Plan (IWRP)

- Water Resources
- Water Supply
  - Quality
  - Quantity
- Water Resources Recovery Facilities



# Integrated Resources Drive Corporate Values



- Reduce air pollution and GHG emissions
- Reduce energy costs
- Support economic growth
- Improve energy and water efficiency
- Extend life of infrastructure and equipment
- Enhanced protection of public health
- Continue to demonstrate leadership

# PUBLIC-PRIVATE PARTNERSHIP FOR ORGANIC RECYCLING

**Merchant Organics Recycling Facility (MORF)**  
replaces Buckman's pelletizer as the next  
generation in beneficial use

- Reduces energy demand and landfill waste
- Greater market opportunity due to type of fertilizer produced
- Lower cost to customers and to City of Jacksonville



# Renewable Natural Gas

- Biogas Credit Feasibility Study underway
- Upgrade biogas from Buckman WRF to a purified Renewable Natural Gas (RNG)
- Evaluate injecting RNG into commercial natural gas pipeline
- Optimize production of RNG from WRF digestion processes



*By capturing waste gas produced by wastewater treatment, JEA reduces greenhouse gas emissions and increases financial value*

# Water Purification

*One Potential Alternative Water Supply Option*



## PHASE 1 RESEARCH & DEVELOPMENT

- Tested two leading technologies at 2 Water
- Reclamation Facilities Report Completion Feb 2019



## PHASE 2 DEMONSTRATION TESTING

- Selected best technology from Phase 1 for optimization
- Immersive public engagement at Demonstration Facility



## PHASE 3 COMMERCIAL IMPLEMENTATION

- Dependent upon Integrated Water Resource Plan insights
- Can be expanded as needed to meet demands

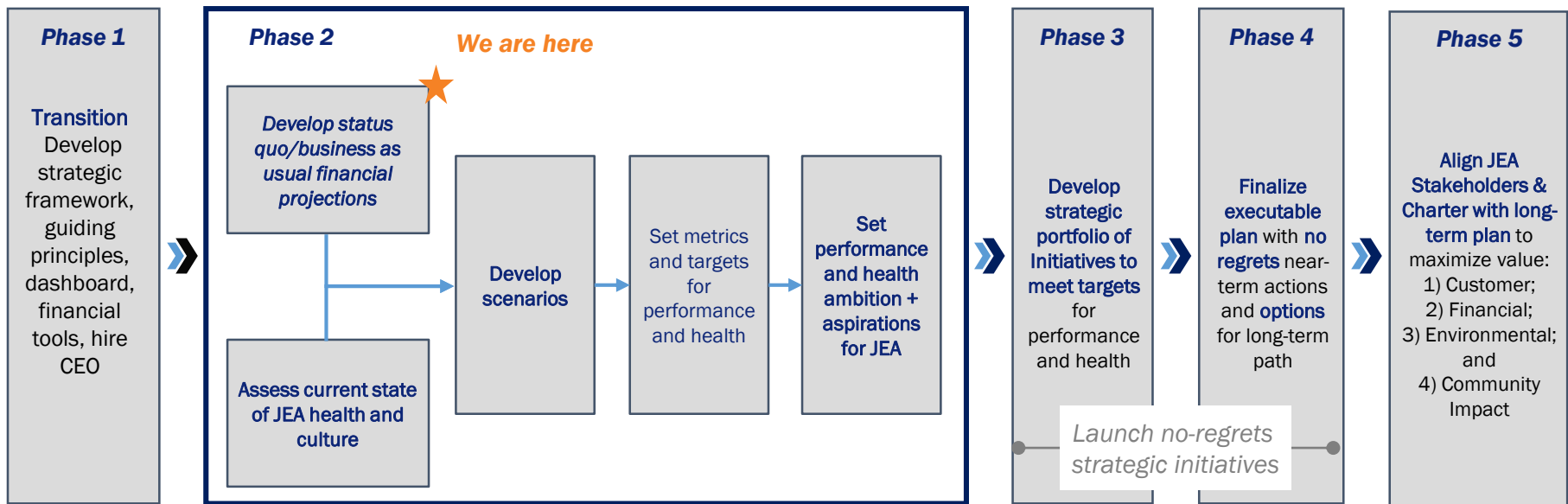


# Priority Five:

10-year strategic plan.

# Our Strategy For Success

## Internal stakeholder alignment (Board, SLT, appointed employees, Union)



## External stakeholder consultation and feedback (e.g. City of Jacksonville)

# Step One: SLT Solidified

John McCarthy named VP  
& Chief Supply Chain  
Officer

Paul Steinbrecher named  
VP & Chief Environmental  
Services Officer

Deryle Calhoun named  
VP/ General Manager  
Water & Wastewater  
Systems

Aaron Zahn named  
permanent Chief  
Executive Officer

Steve McNall named VP  
of Energy & Water  
Planning

April 23,  
2018

April 24,  
2018

July 16,  
2018

October 1,  
2018

November  
27, 2018

January 2,  
2019

January  
16, 2019

February  
4, 2019

Melissa Dykes named  
President & Chief  
Operating Officer

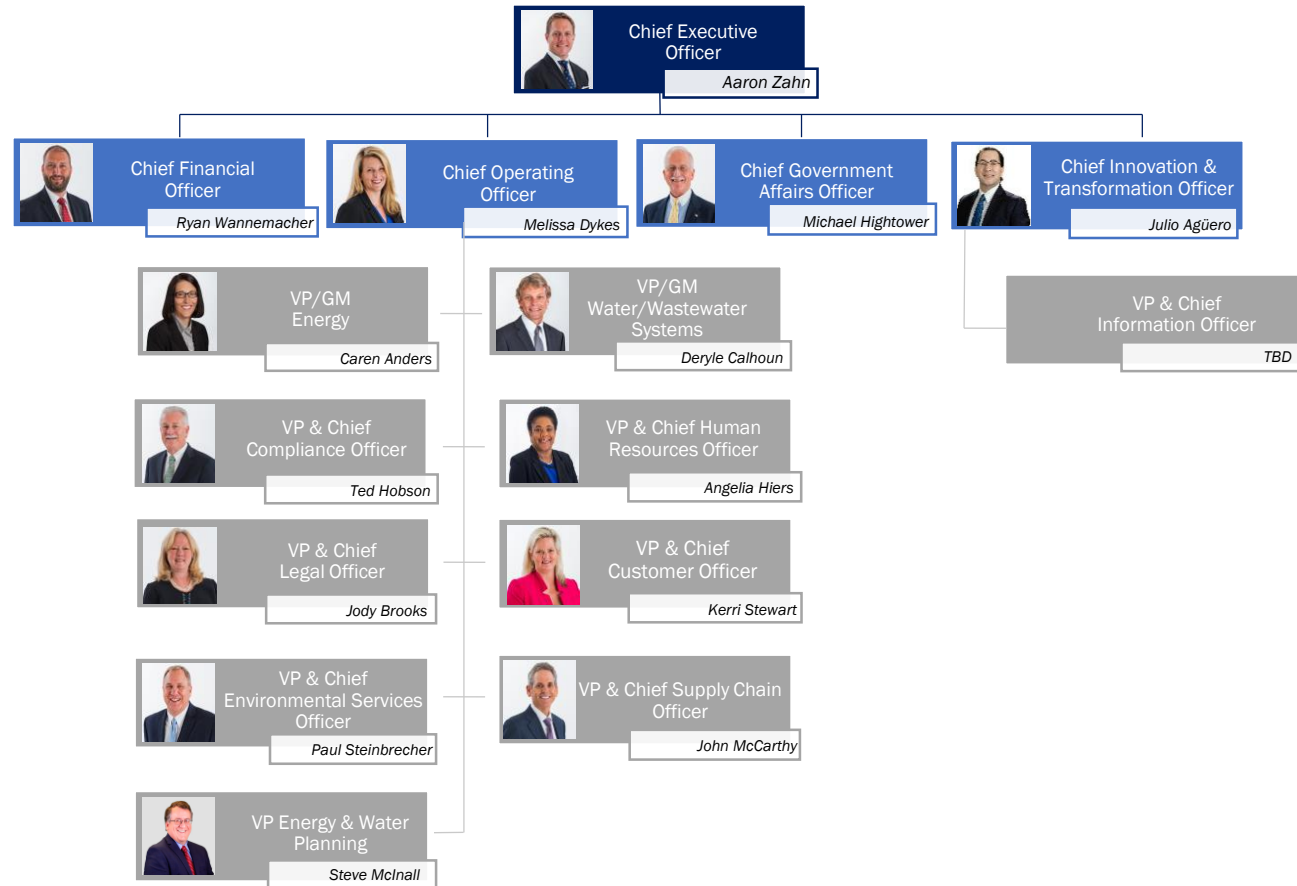
Ryan Wannemacher  
promoted from Interim  
Chief Financial Officer to  
permanent Chief  
Financial Officer

Caren Anders named  
VP/General Manager of  
Energy

Julio Agüero named JEA's  
first Chief Innovation &  
Transformation Officer

# Meet Our Senior Leadership Team

**JEA's Senior Leadership Team is committed to achieving our mission: providing the best service by becoming the center of our customers' energy and water experience.**





# PART 4

## Energy System Overview



# Energy System Infrastructure



## Power Production Assets

- 5 Plants, 16 Units
- Net Capacity: 2,986 MW (3,319 MW winter)
- Fuel Sources: Oil, Natural Gas, Coal, Petroleum Coke
- Small amount of Landfill Gas

## Transmission System

- Voltage Levels (KV): 500, 230, 138 & 69
- 744 Miles of Transmission
- 90 Substations (T&D)

## Distribution System

- Voltage Levels (KV): 26.4, 13.2 & 4.16
- 340 feeders (224 – 26.4kV; 82 – 13kV; 34 – 4kV)
- 6,920 circuit miles (44% Overhead, 56% Underground)
- 104,700 transformers, 204,600 poles



# Energy System Overview

Facility	Primary Fuel Type	Generating Capacity (in MW)	Year in Service
<b>Gas Fuel: 1,990 MW (72%)</b>			
Brandy Branch	Natural Gas	651	2001 - 2005 <sup>2</sup>
Northside Gen Unit 3	Natural Gas/Oil	524	1977
Kennedy	Natural Gas	300	2000 - 2009 <sup>2</sup>
Greenland Energy Center	Natural Gas	300	2011
Landfill Energy Systems	Landfill Gas	15	1997 - 2015 <sup>2</sup>
Southern Power	Natural Gas	200	2018 - 2019
<b>Solid Fuel: 784 MW (28%)</b>			
Northside Gen Units 1 & 2	Pet Coke	586	2003
Scherer 4	Coal	198	1989
<b>Total: 2,770 MW</b>			
<b>Peaking Reserve: 212 MW</b>			
Northside CTs	Diesel Fuel Oil	212	1975
<b>Grand Total: 2,986 MW<sup>3</sup></b>			

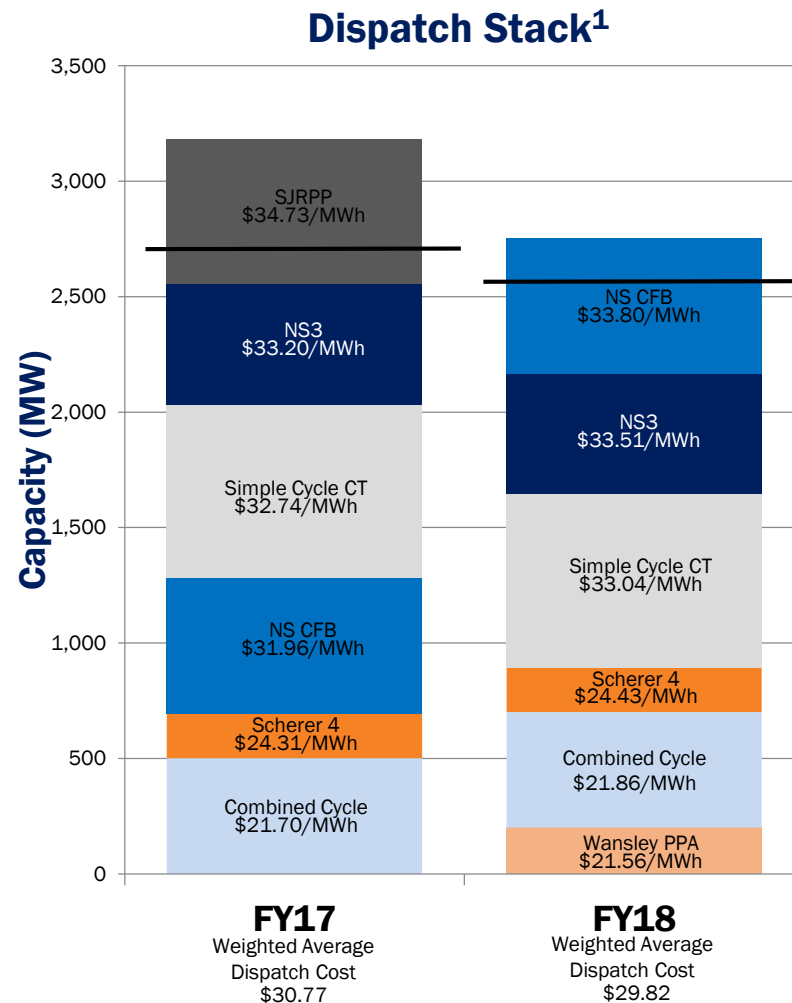
<sup>1</sup> The average dispatch prices at maximum load for each unit from 10/1/2017 through 9/30/2018

Peaking reserve is not being included in dispatch stack

<sup>2</sup> Multiple units, multiple in service dates

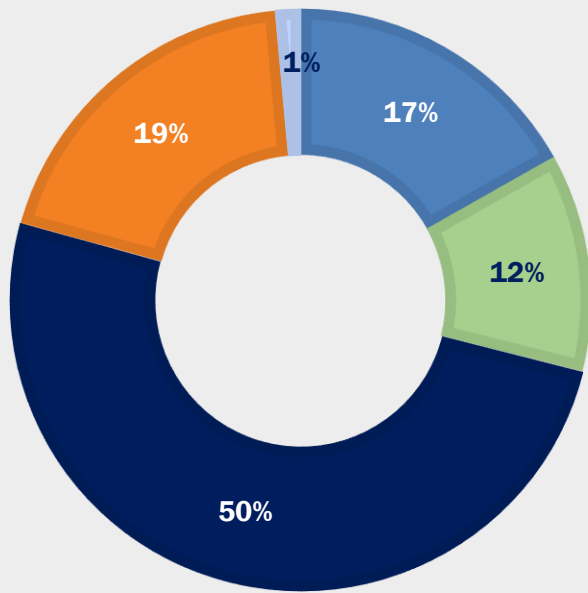
<sup>3</sup> Based on summer net ratings and entitled capacity. Winter net ratings and entitled capacity is 3,309 MW as of 1/1/2019

— Actual Peak

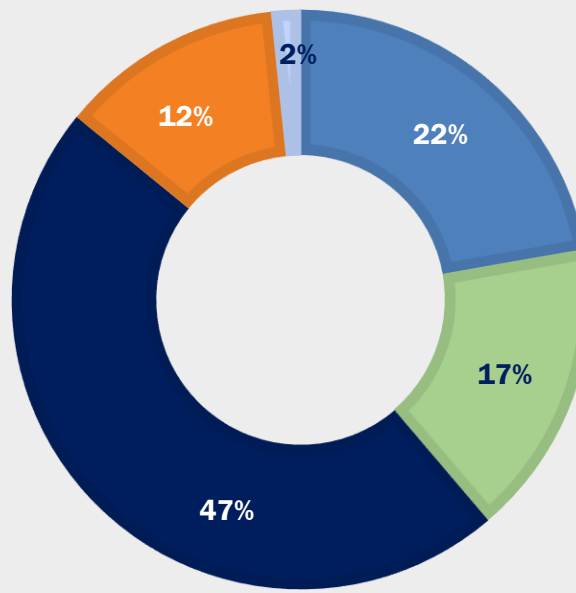


# Energy Fuel Mix

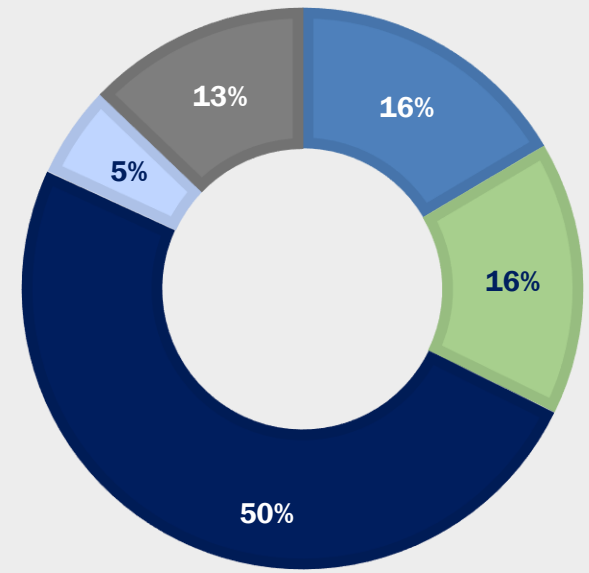
2018 Actuals



2019 Forecast



2023 Forecast



■ Nuclear ■ Coal ■ Pet Coke ■ Purchased Power ■ Renewables ■ Gas

# Energy Performance Monitoring: T&D

## Electric Service Reliability

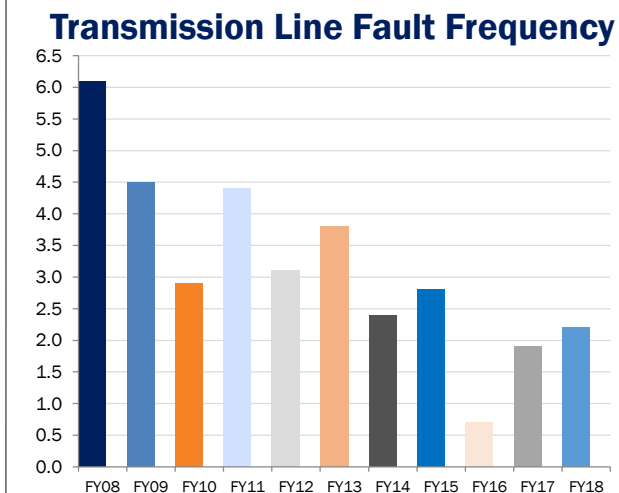
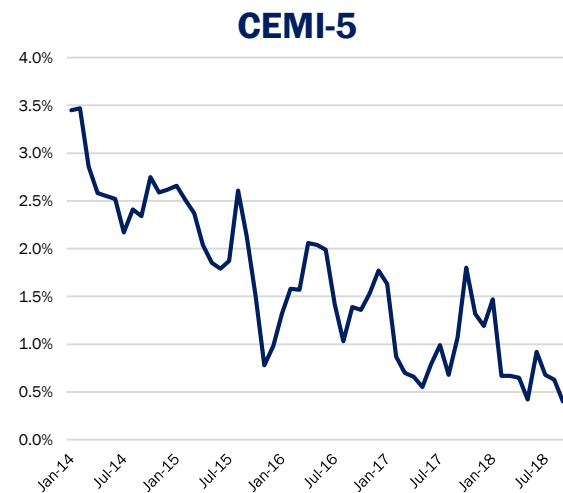
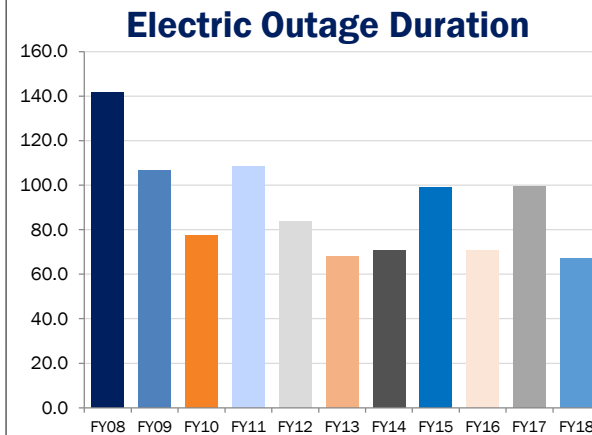
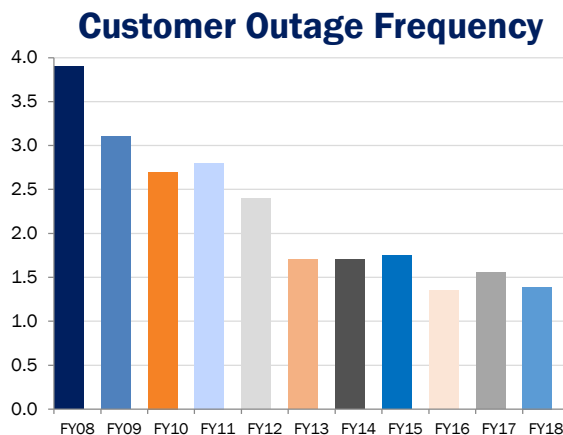
- Outage frequency and duration have been reduced significantly over the last 9 years; running flat this year and below the FY2018 targets
- The typical JEA customer sees 1.39 outages per year and a total outage duration of about 66.9 minutes
- Improvement trend over past four years for CEMI5 1,949 (0.4%) of our customers have experienced more than 5 outages in the past 12 months

## Transmission Line Reliability

- Overall downward trend over the last nine years
- FY2018 (2.2) slightly over target

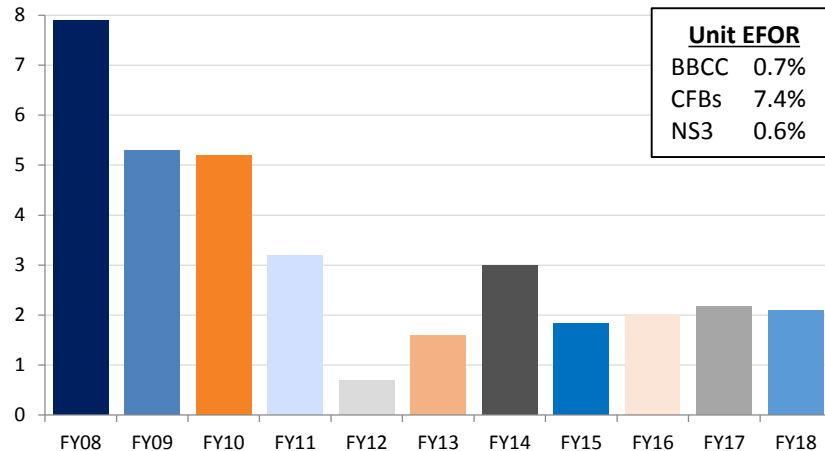
## Other Operational Metrics

- Continue showing favorable trends over time

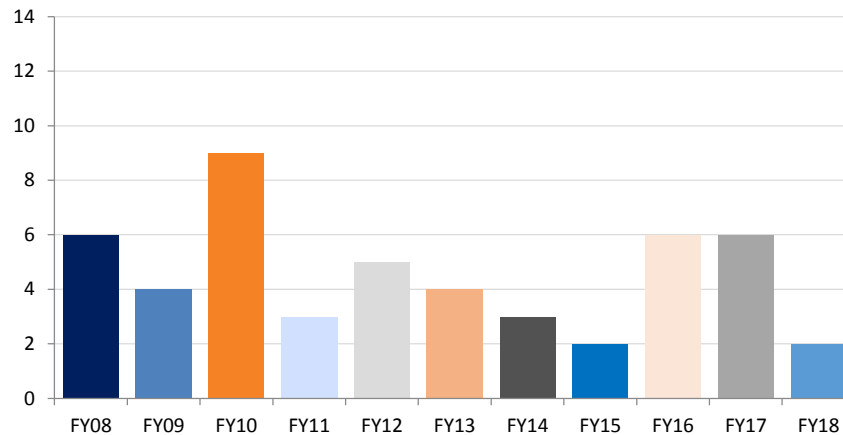


T&D Grid Performance	Metric	FY2018	FY2017	FY2016
Customer Outage Frequency	# of Outages per Year	1.39	1.55	1.4
Electric Outage Duration	# of Minutes out per Year	66.9	99.5	71
Transmission Line Faults	# of Faults per 100 miles	2.2	1.9	0.7
CEMI <sub>5</sub>	% Customers > 5 outages per yr	0.4	1.07	1.4

## Forced Outage Rate



## Reportable Events



Generating Plant Performance	Metric	FY2018	FY2017	FY2016
Generation Fleet Reliability	Forced Outages Rate	2.10	2.17	2.0
Environmental Compliance	Reportable Events	2	6	6

# Energy Performance Monitoring: Generation

## Generating Fleet Reliability

- The JEA fleet Forced Outage Rate is in line with prior 7-year performance though ended slightly above the FY2018 target
- Successful outages completed this FY on steam units at Northside along with the Combined Cycle Unit at Brandy Branch
- High unit reliability contributes to lower fuel and non-fuel expenses

## Environmental Compliance

- Excellent environmental performance in prior years. No air permit exceedances occurred in last three FYs.
- We experienced 2 reportable events at Northside during FY2018
- JEA remains actively engaged in and preparing for all new and emerging environmental regulations

# Energy System Capital Needs and Funding Source

*JEA has streamlined its capital plan, maintaining a healthy utility system in a low-growth environment*

Electric System (\$000s)	Actual	2019	2020	2021	2022	2023	2019-2023 Average
	2018						
Internally Generated Funds Available for Capital <sup>1</sup>	\$162,873	\$136,597	\$226,871	\$151,771	\$129,041	\$131,098	
Capital Fund Balance Withdrawals (Deposits)	0	\$138,403	(7,397)	(29,957)	(39,230)	(41,682)	
Debt Financing	0	0	0	0	0	0	
<b>Capital Plan Spend</b>	<b>\$174,319</b>	<b>\$275,000</b>	<b>\$236,000</b>	<b>\$146,000</b>	<b>\$118,000</b>	<b>\$122,000</b>	<b>\$179,400</b>
Capital Fund Balance <sup>2</sup>	\$189,922	\$51,519	\$58,917	\$88,873	\$128,103	\$169,785	

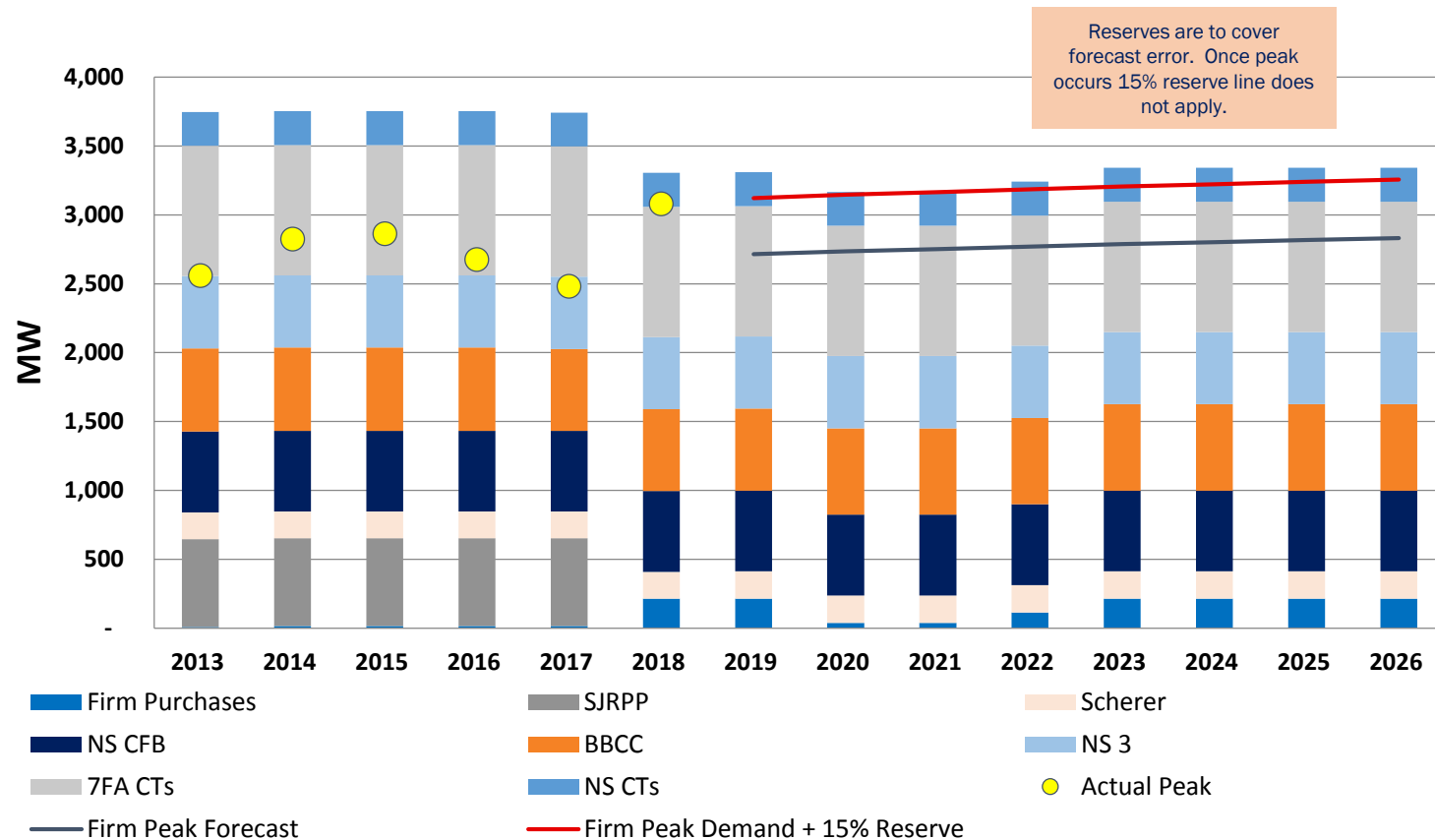
Scherer (\$000s)	Actual	2019	2020	2021	2022	2023	2019-2023 Average
	2018						
Internally Generated Funds Available for Capital	\$22,764	\$10,058	\$10,409	\$4,527	\$9,424	\$4,810	
Capital Fund Balance Withdrawals (Deposits)	0	0	0	0	0	0	
Debt Financing	0	0	0	0	0	0	
<b>Capital Plan Spend</b>	<b>\$22,764</b>	<b>\$10,058</b>	<b>\$10,409</b>	<b>\$4,527</b>	<b>\$9,424</b>	<b>\$4,810</b>	<b>\$7,846</b>

<sup>1</sup> Net of amounts used for planned accelerated debt repayments

<sup>2</sup> Excludes FEMA reimbursement

# Fleet Optimization And Asset Utilization

Generation fleet provides sufficient capacity to meet current and future demand



# St. Johns River Power Park



- After nearly 30 years in service, the St. Johns River Power Park closed on January 5, 2018
- JEA and FPL agreed to terminate the Joint Ownership Agreement and shut down the plant approximately 4 years prior to the JOA termination date
- SJRPP decommissioning is projected to continue until April 2020
- Decommissioning and fuel expenses are billed back to JEA and FPL in accordance to their JOA agreement
  - Currently there are fuel expenses related to railcar repairs, storage and leasing. These costs are expected to end in June 2019, when railcars are returned to lessor.
- The investment recovery team is working on selling most of SJRPP M&S Inventory. Currently M&S inventory is reserved at 97%

**The total transaction NPV benefit to JEA is approximately \$460 million**



# SJRPP Decommissioning Benefits of Transaction

**This underscores JEA's  
commitment to operation  
excellence**

Provides Rate  
Stability for  
Customers

- Transaction provides significant annual cost savings beginning in 2020
- Allows JEA to maintain stable rates and continue early debt retirement

Appropriately  
Sizes the  
Generation  
Fleet

- Increases asset utilization
- Maintains cost effective system resource mix

Reduces JEA's  
Impact on the  
Environment

- Reduces JEA's CO<sub>2</sub> output by 30% by 2030
- Decreases nitrogen to the St. Johns River
- Avoids future expense for compliance with environmental rules

Stimulates  
Economic  
Development

- Expands economic opportunities for industrial and manufacturing growth on 1,000 acres of property in and around the Port of Jacksonville

Proactively  
Addresses  
the Future of  
SJRPP

- Transaction provided a clear path for the termination of the SJRPP Joint Ownership Agreement and the retirement of the facility



# Energy System Summary Page

- ✓ Top quartile operational performance
- ✓ Capital plan funded without debt
- ✓ Rates stable for the five year planning horizon





# PART 5.....

Plant Vogtle Update

# Vogtle 3 & 4 Overview



- No changes to in-service dates
- Co-owner agreement to continue construction
- Sustained improvement on Cost Performance Index
- 3 of 4 Chinese AP1000 units (Sanmen 1 and 2 and Haiyang 1) completed and connected to grid

**Expected completion: November 2021 (Unit 3) and November 2022 (Unit 4)**



# Vogtle 3 & 4 Milestones Completed In 2018

- ▶ **Q1**
  - ✓ Set Unit 4 Reactor Vessel Inside Containment
  - ✓ Achieve 90 percent pass rate on the 3<sup>rd</sup> NRC Initial License exam
  - ✓ Integrated System Validation retest completed on Main Control Room Simulator
  
- ▶ **Q2**
  - ✓ INPO renewed the accreditation of Operations training program
  - ✓ Unit 3 Shield Building reinforced concrete completed to allow set of full panel-rings
  
- ▶ **Q3**
  - ✓ Set Unit 4 Steam Generator B inside Containment
  - ✓ Delivery of Unit 3 Cyber Security Monitoring System hardware and software
  - ✓ Established Southern-controlled IT technology platform for site
  
- ▶ **Q4**
  - ✓ Design completed for site-specific engineering and nuclear island electrical raceway design optimization
  - ✓ Set Unit 4 Generator Stator for Turbine Assembly
  - ✓ 34 ITAAC Closure Notifications (ICNs) and 154 uncompleted ITAAC Notifications (UINs) submitted to NRC for review

Source: Southern Company 4<sup>th</sup> Quarter 2018 Earnings Presentation





# PART 6 .....

## Water & Wastewater System Overview



# Water & Wastewater System Infrastructure



## Water System

- 20 major and 18 small water treatment plants and two re-pump facilities
- 136 active water supply wells, 4,755 miles of water distribution mains and total finished water storage capacity of over 81 million gallons
- Two major and four small distribution grids



## Wastewater System

- Approximately 4,027 miles of gravity sewers and force mains
- 1,422 pumping stations, 697 low pressure sewer units, and 11 treatment plants currently ranging in rated average daily treatment capacity from approximately 0.2 to 52.5 MGD



# Water & Wastewater System Performance Monitoring

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

Measured by 132 pressure monitoring stations in the distribution system. Pressure must be greater than 20 psi, and is expected to be greater than 50 psi

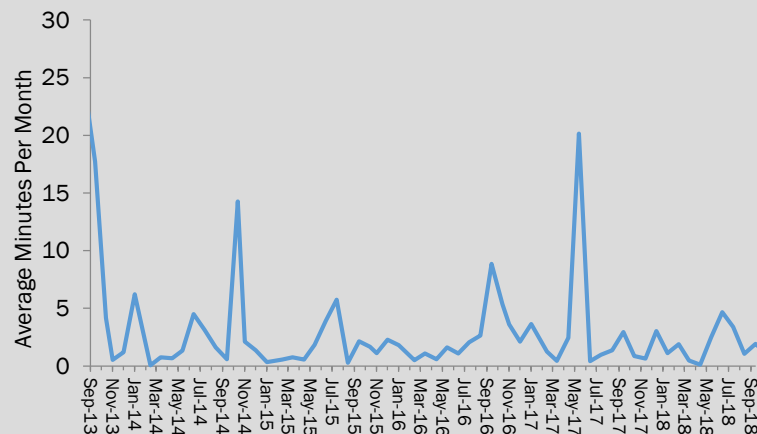
## Unplanned Water Outages

Less than 2% of customer base experience an unplanned outage annually

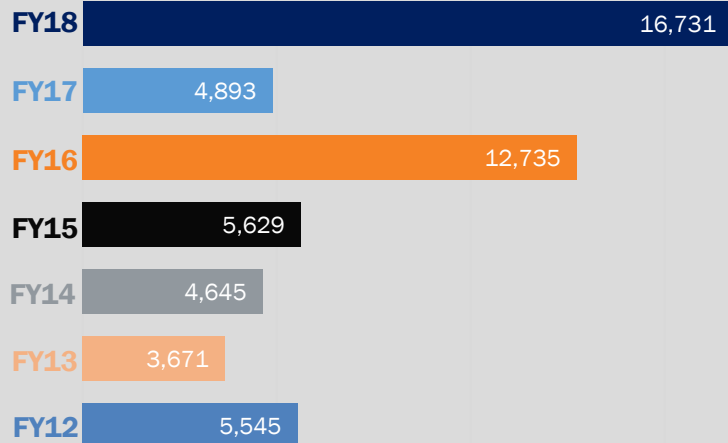
## Consumptive Use Permit (CUP)

Condition 12: Annual average daily flow has a range between 5% to 20% below the annual limit

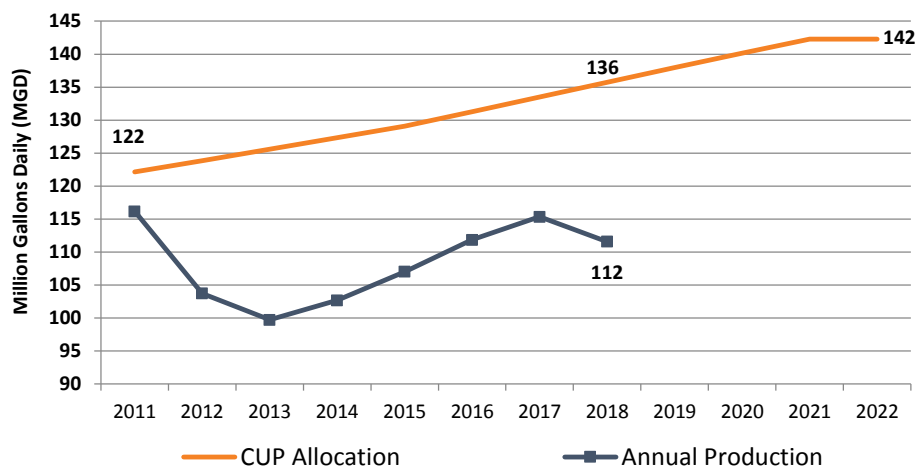
## Average Minutes Water Pressure Less Than 30 PSI



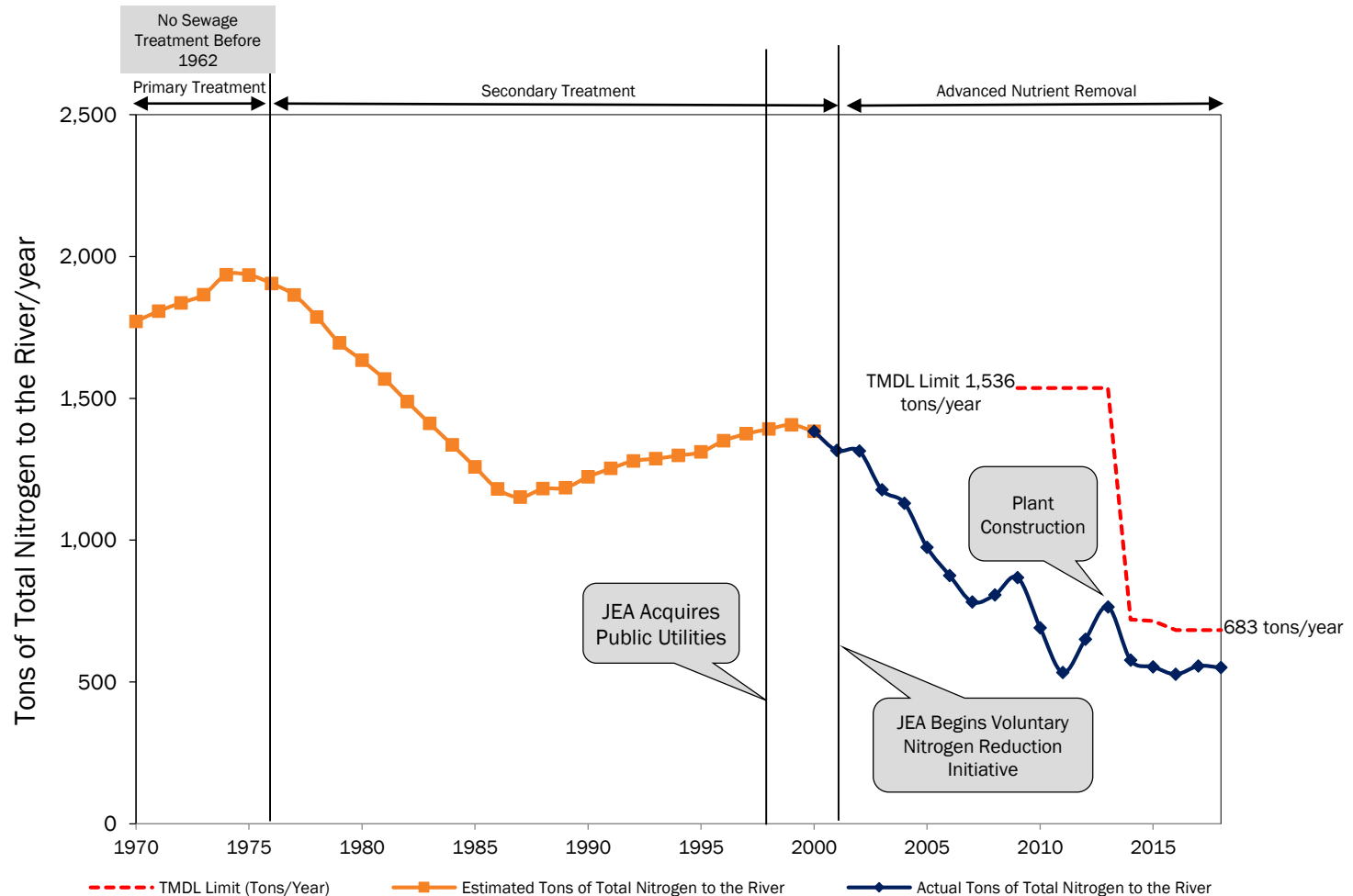
## # Of Customers Affected By Unplanned Water Main Outages



## Consumptive Use Permit (CUP)



# Health of the St Johns River: Nitrogen Reduction Goals



# Water & Wastewater System Capital Needs and Funding Source

*The Water and Sewer capital plan increases are driven by: growth in both systems, projects necessary for regulatory compliance, and programs to rehabilitate and harden infrastructure critical to system operation and reliability*

- Current rates (1.5% customer growth) are adequate to fund recurring and reinvestment type projects over planning horizon
- Over 1/3<sup>rd</sup> of projected capital spend is directly growth – capacity expansion related
- Entire projected capital plan of \$1B over 5 years continues to be funded without the need for issuance of new debt
- Accelerated debt repayment in 2019 allows for additional internally generated funds to be available for capital over the next 5 years

## Funding with NO NEW DEBT!

Water and Sewer System (\$000s)	Actual	2019	2020	2021	2022	2023	2019- 2023 Average
	2018						
Internally Generated Funds Available for Capital <sup>1</sup>	\$181,406	\$85,271	\$223,234	\$224,710	\$215,853	\$203,411	
Capital Fund Balance Withdrawals (Deposits)	\$8,904	\$114,729 <sup>2</sup>	(\$13,234)	(\$14,710)	(\$5,853)	\$6,589	
Debt Financing	0	0	0	0	0	0	
<b>Capital Plan Spend</b>	<b>\$199,314</b>	<b>\$200,000</b>	<b>\$210,000</b>	<b>\$210,000</b>	<b>\$210,000</b>	<b>\$210,000</b>	<b>\$208,000</b>
<b>Capital Fund Balance</b>	<b>\$141,415</b>	<b>\$26,686</b>	<b>\$39,920</b>	<b>\$54,630</b>	<b>\$60,483</b>	<b>\$53,894</b>	

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

<sup>2</sup> Net of amounts taken from capital fund balance for accelerated debt repayments

# CUP: Water Supply Sustainability Plan

## iWater

*JEA Water Supply Testing  
and Rehabilitation Program*

FY15 to FY20



## IWRP Study

*Integrated Water  
Resource Plan*

FY19 to FY21



## Implementation Plan

*JEA Water Supply and  
Demand Program*

FY20 ...

### Production & Transmission

- Well rehab and performance for 84 of JEA's 137 raw water wells
- Hydraulic and water quality modeling
- Identify transmission piping projects

### Supply & Transmission

- Maximize reclaimed water
- TWMP\* (FY 2000 to Present)
- Water purification demonstration plant
- 3rd river crossing evaluation
- Aquifer storage and recovery

\* JEA's Total Water Management Plan (TWMP)

### IWRP Implementation

- Alternative water supplies
- Conservation messaging
- Demand-side management program
- Comprehensive communication plan

- JEA obtained a 20-year consolidated Consumptive Use Permit (CUP) in May 2011
- JEA continues to implement the wellfield rehabilitation and Reclaimed System expansion program
- Sustainable water supply will integrate outcomes of the IWRP

# Framework to Resiliency

In response to the challenges JEA experienced during Hurricanes Matthew and Irma, the resiliency program was developed to better understand system vulnerabilities and proactively improve system reliability and operational continuity of JEA's Water, Wastewater, Reclaimed Water, and Chilled Water Systems.



Signed a contract with CH2M/Jacobs on May 7, 2018 to provide Resiliency Assessment, Program Management and Engineering Services. A large portion of this contract will look to identify system vulnerabilities and provide recommendations to address these issues. New Standards will be developed based on the findings from these assessments as well as projected future climate conditions.



Collaborating with JEA's Electric System Analysis Group to proactively evaluate the power quality of the electric circuit that is serving some of JEA's critical Class III and IV pump stations. The end in mind is to identify dual electric feed opportunities at specific pump stations and thus enhancing its reliability.



Initiated system hardening projects like converting the primary and secondary electric lines serving critical pump stations from overhead to underground. At the end of FY18, 26 secondary electric lines and 19 primary electric lines were converted from overhead to underground.



Having backup generation is essential to maintaining operational continuity especially during extreme weather conditions. JEA has purchased multiple types of assets for backup generation. JEA has also entered into a lease agreement to rent backup generation during the Storm Season. At the end of FY18 JEA had procured the following assets under the Resiliency Program:

<sup>1</sup> JEA signed a lease agreement with Sunbelt to lease 100 portable generators and 50 portable pumps during Storm Season (June 1<sup>st</sup> thru November 30<sup>th</sup> )

Fixed Generators	Fixed Pumps	Portable Pumps	Rental Generators <sup>1</sup>	Rental Pumps <sup>1</sup>
103	33	12	100	50



# Water & Wastewater System Summary Page

- ✓ Top quartile operational performance
- ✓ Capital plan funded without debt
- ✓ Rates stable for the five year planning horizon





# PART 7.....

## Conclusion



# JEA's financials, operations, governance, strategic planning, and overall business remain sound.

## Energy

### JEA merits a AA credit rating

- ✓ Maintained excellent financial and operation metrics
- ✓ Repaid \$426 million in debt for a total of \$2.1 billion since 2009 with continued commitment to actively and aggressively deleverage and de-risk the business
- ✓ Continued to strategically plan to absorb the cost of Plant Vogtle
- ✓ Capital program will continue to be funded with no new debt & no planned base rate increases
- ✓ Strengthened our fuel diversity and purchased power agreements
- ✓ Re-evaluated our risks and continued actively seeking ways to mitigate them

## Water & Wastewater

### JEA merits a AAA credit rating

- ✓ Superior operational and financial metrics
- ✓ Robust growth in sales and customers
- ✓ Ability to fund capital program funded with no new debt & no rate increases
- ✓ Repaid \$263 million in debt for a total of \$676 million since 2011
- ✓ Continued commitment to investing in infrastructure to ensure reliability in operations now and into the future
- ✓ Initiated system hardening projects
- ✓ Researched and developed potential alternative water supply options



# PART 8.....

## Supplemental Information



## G. Alan Howard

G. Alan Howard is a native of St. Simons Island, Georgia. Mr. Howard received his law degree and undergraduate degree, with high honors, from the University of Georgia.

Mr. Howard is a transactional attorney whose practice focuses on mergers, acquisitions, project finance, corporate finance and securities matters. His clients span a range of industry sectors, including energy, technology, insurance and financial services. He regularly advises clients on corporate governance issues. Mr. Howard represents buyers and sellers of small to mid-market companies in mergers, stock purchase and asset purchase transactions. He is experienced in the structuring, negotiation and documentation of a broad spectrum of syndicated and non-syndicated credit transactions involving both domestic and foreign companies in a wide variety of industries. These transactions include public and private bond financing, secured and unsecured loan facilities, senior, subordinated and mezzanine credit facilities, asset based loan facilities, and construction loan facilities. Mr. Howard also represents individual, family office and institutional investors in selected investment transactions. Mr. Howard represents startup to early market companies in exempt limited offerings. Mr. Howard also represents both lenders and sponsors in project finance transactions involving the acquisition, construction and financing of electric power generation and landfill gas conversion facilities.



## Reverend Frederick Newbill

Jacksonville native, Frederick Douglas Newbill has been pastor of First Timothy Baptist Church since May 1987. Under his leadership, the congregation has grown from 150 to more than 1000 members. Early in his pastorate, First Timothy physically moved from a small building at Hart and Barnett to its present location on Biscayne Blvd. in north Jacksonville. He is an innovative and energetic practitioner of his faith. Pastor Newbill is a Spirit-filled, gifted pastor and teacher who is totally committed to his calling and ministries. As a result, many hearts have been blessed and many souls have been saved throughout his 29 year tenure at First Timothy. He believes in striving for the advancement of God's Church and promoting its prosperity and spirituality.

Pastor Newbill has served as former president of the Baptist Ministers Conference of Duval and Adjacent Counties, former president of Union Saint James Association Congress of Christian Education, former chairperson for the Congress of National Black Churches and former secretary of the Local One Church/One Child National Organization. Through this program a number of children have been adopted locally and nationwide. He has also served as first Vice Moderator of Union Saint James Association and was a sponsor of a church start Providence Christian Fellowship, on the West Side of Jacksonville.





## Kelly Flanagan

A Jacksonville native, Kelly Flanagan was named the Jacksonville Jaguars' senior vice president and Chief Financial Officer in August 2014, after joining the organization in 2012 and being promoted to vice president in 2013. She is responsible for developing and leading the team and related entities' financial strategy, including planning and business analytics, corporate accounting and financial reporting and analysis.

Flanagan has extensive experience in sports business. Prior to joining the Jaguars, along with now Jaguars President Mark Lamping, she was a member of the executive team at the New Meadowlands Stadium, later MetLife Stadium, home to the New York Giants and New York Jets. Flanagan served in the finance department during the construction and commissioning of the new stadium, ultimately being named controller and lead stadium finance representative to the venue's primary tenants and owners, the Giants and Jets.

Prior to serving at MetLife Stadium, Flanagan was a member of the Entertainment & Media practice of PricewaterhouseCoopers in New York City, where she consulted for both public and private sports and entertainment clients and obtained her C.P.A. license. She has been named a "Game Changer" by SportsBusiness Journal.

A graduate of Episcopal School of Jacksonville where she currently serves as a member of its Board of Trustees, Flanagan holds a M.S. in Sports Management degree from Columbia University in New York City and a bachelor's degree in Accounting as well as an M.B.A. from the Ervin K. Haub School of Business at Saint Joseph's University in Philadelphia. She was appointed by the Mayor and confirmed by the City Council to serve as a member of the Board of Directors of the Jacksonville Electric Authority.



## John J. Campion

John J. Campion is the co-founder and chairman of APR Energy, a global company specializing in the rapid deployment of cost-efficient reliable electricity satisfying temporary and longer-term power needs. Campion is active in his philanthropic endeavors, international business expertise and rare rally car collection.

A native of Cork, Ireland, Campion immigrated to the United States in 1984 with \$26 in his pocket and a job working as a member of the lighting crew for a rock 'n' roll band. Campion spent more than two decades in the entertainment industry working with international musical artists such as Michael Jackson, U2, David Bowie and others, as well as for the Olympic Games in Atlanta and Sydney.

Passionate about the rock 'n' roll industry and determined to leave his mark, Campion co-founded his first company Showpower, Inc., which was originally funded by Michael Jackson. This new endeavor provided portable power generators to the entertainment industry, a need Campion recognized through his years on the road. Showpower was later acquired by General Electric (GE) Energy Rentals. Campion joined GE as its executive vice president of sales and marketing. Following his time with GE, Campion served as president of Alstom Power Rentals, a subsidiary of Paris-based Alstom Power, Inc. In 2004, Campion acquired Alstom and created what is today known as APR Energy.

A true entrepreneur with an innovative spirit, Campion holds various patents, including two for a scalable portable modular power plant, and has received numerous awards and recognitions. Recently, Campion earned the 2016 Ellis Island Medal of Honor award and the Jacksonville Business Journal's Ultimate CEO Award. He has also been a featured commentator on national media outlets such as Bloomberg TV, CNBC, Fox News, Forbes and other national publications.

In 2014, Campion and his wife, Suzanne, founded the John and Suzanne Campion Foundation, a charitable giving organization focused on health, education and nutrition for the less privileged. Through their Foundation, the Campion's sponsored 100 children for Christmas 2016 at the Sulzbacher Center, an organization devoted to empowering homeless and at-risk women, children and men through health, housing and income services thereby restoring hope and self-sufficiency. John and Suzanne also support the Julia's Butterfly Foundation, a charitable organization dedicated to improving the lives of terminally and chronically ill children and their families. Eva's Village is another non-profit they support, helping to provide shelter, food, and education for homeless and needy adults and their children.

Campion was integral in the launch of Team Ireland, an international program designed to support young drivers in the sports of rallying, racing and carting. He also provides ongoing financial assistance and mentorship to the University of North Florida's Osprey SAE Student Race Team. Campion is a partner in Just a Bunch of Roadies (JABOR), a global humanitarian group that provides resources and relief to areas following a disaster and serves on the Advisory Board of the Tim and Steph Busch School of Business for The Catholic University of America, where Campion helps students develop both personally and academically. In 2017, John received an Honorary Degree from the University of North Florida College of Computing, Engineering and Construction.



## Camille J. Lee-Johnson

Camille J. Lee-Johnson is Chief Operating Officer for Lee Wesley & Associates, a 2nd generation family-business. Since joining the Company in 2007 Camille has been committed to delivering top-notch results for the organization. Lee Wesley owns and operates several Burger King and Panda Express' in Orlando, Jacksonville, and Norfolk, Virginia. In addition, Lee Wesley also has two (2) joint venture partnerships with HMS Host in the Orlando and Jacksonville Airport and is the Operating Partner with Levy Restaurants in the Camping World Stadium and Amway Center in Orlando, FL (home of the Orlando Magic).

"Lead by example" is Mrs. Lee-Johnson's motto. Her down-to-earth approach to leadership is how she has created an employee-centric organization. Currently, she spends most of her time within the Operations of the business and planning for Company growth.

As part of her background, Camille graduated from Wake Forest University with a Bachelor of Arts in Communications and International Studies. During that time, she played Division I golf for the Wake Forest Women's Golf Team. As the first black female golfer, Camille helped lead the team to a runner up finish in the 2002 NCAA ACC Championship. She gained international work experience in London as part of a business development program with Boston University. She also earned her Masters in Business and Entrepreneurship from the Entrepreneurship Masters program at the University of Florida as well as a business certification from Harvard University.

Her past work experience includes holding positions as a Strategic Consultant and Marketing Account Executive for Zenith Media and Wasserman Media Group. Camille managed the multi-million dollar title sponsorship and lead the strategic development and execution of the inaugural St. Paul Travelers' Championship – a PGA TOUR event.

In 2017, Camille was elected by Governor Rick Scott to serve on the Board of Directors for CareerSource Florida. She is also currently deeply rooted within Burger King holding several positions including Board Member for the National Franchise, Vice President of the Minority Franchise Association and Inclusion Council Association.

She is a member of the Young Presidents Organization (YPO) and also a member of Leadership Jacksonville, Class of 2014. Camille and her husband of six years, Lorenzo, currently reside in Atlantic Beach, FL.





## April Green

April Green currently serves as chief operating officer for Baxter Technology, in addition to being the CFO/COO for Bethel Baptist Institutional Church in Jacksonville. She previously served as corporate tourism director for the Jacksonville Convention & Visitors Bureau and senior vice president secondary marketing for Bank of America.

An Air Force Veteran who served in Desert Storm, Mrs. Green brings to the table copious experience in business and marketing, along with a deep-seated connection with the community through religious faith and philanthropy.

Mrs. Green's community involvement activities include: serving as a board member with the Jacksonville Chamber of Commerce, Hands On Jacksonville, and B.E.S.T Academy. She is also a member of the 2015 Leadership Florida class.



# PART 9

## Supplemental Financial Information



# Electric System: IRP Sales Assumption

DEBT SERVICE COVERAGE PROJECTIONS	Actual	Projection	Projection	Projection	Projection	Projection
OPERATING REVENUES:	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2020	Fiscal Year 2021	Fiscal Year 2022	Fiscal Year 2023
Base Rate System Revenues	771,955,029	761,887,030	770,648,088	774,978,004	778,998,267	783,602,338
Fuel Rate System Revenues	398,297,723	391,543,750	396,051,607	398,279,493	400,348,053	402,717,001
Off System Sales Revenues	1,109,990	4,447,582	2,944,000	1,944,000	1,876,000	2,608,000
Uncollectibles	(1,288,188)	(1,895,811)	(1,927,010)	(1,928,583)	(1,929,245)	(1,930,947)
Franchise and Gross Receipts Taxes	59,551,139	58,492,162	59,165,048	59,497,604	59,806,377	60,159,989
Other Revenues	35,815,718	34,610,544	32,770,427	34,437,733	35,237,087	33,864,666
Net Amt (Paid Into)/Rec'd From Rate Stabilization Fund	(33,825,277)	44,810,885	16,679,781	29,371,669	(4,971,894)	(4,999,787)
Net Amt (Paid Into) Rec'd From Fuel Reserve	57,339,075	26,614,336	(12,459,758)	(13,587,032)	(5,592,621)	(10,679,694)
<b>Total Operating Revenues</b>	<b>\$ 1,288,955,209</b>	<b>\$ 1,320,510,478</b>	<b>\$ 1,263,872,184</b>	<b>\$ 1,282,992,888</b>	<b>\$ 1,263,772,026</b>	<b>\$ 1,265,341,567</b>
OPERATING EXPENSES:						
O&M incl PSC Fee	204,981,910	220,001,635	212,289,053	217,805,264	228,082,619	232,737,628
Fuel and Purchased Energy	328,159,602	301,331,196	277,271,427	281,447,841	299,209,090	296,613,474
Non-Fuel Purchased Power	244,477,875	205,362,982	202,872,839	206,951,267	249,644,025	293,932,701
Franchise and Gross Receipts Taxes	59,551,139	58,686,740	59,366,436	59,706,040	60,022,109	60,383,271
<b>Total Operating Expenses</b>	<b>\$ 837,170,526</b>	<b>\$ 785,382,553</b>	<b>\$ 751,799,755</b>	<b>\$ 765,910,413</b>	<b>\$ 836,957,843</b>	<b>\$ 883,667,074</b>
<b>Net Revenues</b>	<b>\$ 451,784,683</b>	<b>\$ 535,127,925</b>	<b>\$ 512,072,429</b>	<b>\$ 517,082,476</b>	<b>\$ 426,814,182</b>	<b>\$ 381,674,493</b>
OTHER DEDUCTIONS						
Debt Service: Principal	129,900,000	116,230,000	60,790,000	17,430,000	7,720,000	6,860,000
Debt Service: Interest	71,459,451	78,326,733	67,396,717	68,217,892	64,130,735	61,041,047
Less Interest on Sinking Fund and Build America Bond Subsidy	(5,001,394)	(6,032,733)	(6,025,315)	(5,999,472)	(5,993,007)	(5,952,591)
<b>Total Debt Service</b>	<b>\$ 196,358,057</b>	<b>\$ 188,524,000</b>	<b>\$ 122,161,401</b>	<b>\$ 79,648,420</b>	<b>\$ 65,857,728</b>	<b>\$ 61,948,457</b>
Contribution To City	\$ 91,471,795	\$ 92,952,147	\$ 93,881,668	\$ 94,820,485	\$ 95,768,690	\$ 96,726,377
<b>SENIOR AND SUBORDINATED DEBT SERVICE COVERAGE</b>	<b>2.30 x</b>	<b>2.84 x</b>	<b>4.19 x</b>	<b>6.49 x</b>	<b>6.48 x</b>	<b>6.16 x</b>
<b>ADJUSTED DEBT SERVICE COVERAGE</b>	<b>1.83 x</b>	<b>2.35 x</b>	<b>3.42 x</b>	<b>5.30 x</b>	<b>5.03 x</b>	<b>4.60 x</b>
<b>FIXED COVERAGE with PPA Contract Payments</b>	<b>1.69 x</b>	<b>2.06 x</b>	<b>2.66 x</b>	<b>3.31 x</b>	<b>2.41 x</b>	<b>1.96 x</b>
PPA Contract Payments	\$ 28,871,075	\$ 35,017,307	\$ 34,475,562	\$ 34,647,362	\$ 29,762,907	\$ 29,685,175
Vogle Principal Debt Service Payments	\$ 11,695,768	\$ 15,126,253	\$ 21,607,556	\$ 34,325,078	\$ 92,762,934	\$ 141,407,881
System Sales excl FPU	12,328,910	12,200,000	12,340,459	12,409,877	12,474,331	12,548,144
FPU Sales	35,429	0	0	0	0	0
<b>TERRITORIAL SYSTEM MWH SALES</b>	<b>12,364,339</b>	<b>12,200,000</b>	<b>12,340,459</b>	<b>12,409,877</b>	<b>12,474,331</b>	<b>12,548,144</b>
<b>Growth Rate: System MWH Sales (%)</b>	<b>2.61%</b>	<b>-1.33%</b>	<b>1.15%</b>	<b>0.56%</b>	<b>0.52%</b>	<b>0.59%</b>
<b>OFF SYSTEM MWH SALES</b>	<b>35,429</b>	<b>137,634</b>	<b>113,300</b>	<b>78,600</b>	<b>81,100</b>	<b>127,000</b>
<b>TOTAL MWH SALES</b>	<b>12,399,768</b>	<b>12,337,634</b>	<b>12,453,759</b>	<b>12,488,477</b>	<b>12,555,431</b>	<b>12,675,144</b>

# Electric System: Flat Sales

DEBT SERVICE COVERAGE PROJECTIONS	Actual	Projection	Projection	Projection	Projection	Projection
OPERATING REVENUES:	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2020	Fiscal Year 2021	Fiscal Year 2022	Fiscal Year 2023
Base Rate System Revenues	771,955,029	761,887,030	749,412,136	749,412,136	749,412,136	749,412,136
Fuel Rate System Revenues	398,297,723	391,543,750	385,125,000	385,125,000	385,125,000	385,125,000
Off System Sales Revenues	1,109,990	4,447,582	2,944,000	1,944,000	1,876,000	2,608,000
Uncollectibles	(1,288,188)	(1,895,811)	(1,884,953)	(1,877,951)	(1,870,651)	(1,863,235)
Franchise and Gross Receipts Taxes	59,551,139	58,492,162	57,534,038	57,534,038	57,534,038	57,534,038
Other Revenues	35,815,718	34,610,544	32,770,427	34,437,733	35,237,087	33,864,666
Net Amt (Paid Into)/Rec'd From Rate Stabilization Fund	(33,825,277)	44,810,885	17,057,691	29,826,633	(4,445,387)	(4,391,347)
Net Amt (Paid Into) Rec'd From Fuel Reserve	57,339,075	26,614,336	(12,598,069)	(13,753,545)	(5,785,318)	(10,902,378)
<b>Total Operating Revenues</b>	<b>\$ 1,288,955,209</b>	<b>\$ 1,320,510,478</b>	<b>\$ 1,230,360,269</b>	<b>\$ 1,242,648,044</b>	<b>\$ 1,217,082,905</b>	<b>\$ 1,211,386,881</b>
<b>OPERATING EXPENSES:</b>						
O&M incl PSC Fee	204,981,910	220,001,635	212,289,053	217,805,264	228,082,619	232,737,628
Fuel and Purchased Energy	328,159,602	301,331,196	266,206,509	268,126,835	283,793,340	278,798,789
Non-Fuel Purchased Power	244,477,875	205,362,982	202,872,839	206,951,267	249,644,025	293,932,701
Franchise and Gross Receipts Taxes	59,551,139	58,686,740	57,735,426	57,742,474	57,749,769	57,757,320
<b>Total Operating Expenses</b>	<b>\$ 837,170,526</b>	<b>\$ 785,382,553</b>	<b>\$ 739,103,826</b>	<b>\$ 750,625,841</b>	<b>\$ 819,269,754</b>	<b>\$ 863,226,437</b>
<b>Net Revenues</b>	<b>\$ 451,784,683</b>	<b>\$ 535,127,925</b>	<b>\$ 491,256,443</b>	<b>\$ 492,022,203</b>	<b>\$ 397,813,152</b>	<b>\$ 348,160,443</b>
<b>OTHER DEDUCTIONS</b>						
Debt Service: Principal	129,900,000	116,230,000	60,790,000	17,430,000	7,720,000	6,860,000
Debt Service: Interest	71,459,451	78,326,733	67,396,717	68,217,892	64,130,735	61,041,047
Less Interest on Sinking Fund and Build America Bond Subsidy	(5,001,394)	(6,032,733)	(6,025,315)	(5,999,472)	(5,993,007)	(5,952,591)
<b>Total Debt Service</b>	<b>\$ 196,358,057</b>	<b>\$ 188,524,000</b>	<b>\$ 122,161,401</b>	<b>\$ 79,648,420</b>	<b>\$ 65,857,728</b>	<b>\$ 61,948,457</b>
Contribution To City	\$ 91,471,795	\$ 92,952,147	\$ 93,881,668	\$ 94,820,485	\$ 95,768,690	\$ 96,726,377
<b>SENIOR AND SUBORDINATED DEBT SERVICE COVERAGE</b>	2.30 x	2.84 x	4.02 x	6.18 x	6.04 x	5.62 x
<b>ADJUSTED DEBT SERVICE COVERAGE</b>	1.83 x	2.35 x	3.25 x	4.99 x	4.59 x	4.06 x
<b>FIXED COVERAGE with PPA Contract Payments</b>	1.69 x	2.06 x	2.54 x	3.14 x	2.25 x	1.81 x
PPA Contract Payments	\$ 28,871,075	\$ 35,017,307	\$ 34,475,562	\$ 34,647,362	\$ 29,762,907	\$ 29,685,175
Vogtle Principal Debt Service Payments	\$ 11,695,768	\$ 15,126,253	\$ 21,607,556	\$ 34,325,078	\$ 92,762,934	\$ 141,407,881
System Sales excl FPU	12,328,910	12,200,000	12,000,000	12,000,000	12,000,000	12,000,000
FPU Sales	35,429	0	0	0	0	0
<b>TERRITORIAL SYSTEM MWH SALES</b>	12,364,339	12,200,000	12,000,000	12,000,000	12,000,000	12,000,000
Growth Rate: System MWH Sales (%)	2.61%	-1.33%	-1.64%	0.00%	0.00%	0.00%
<b>OFF SYSTEM MWH SALES</b>	35,429	137,634	113,300	78,600	81,100	127,000
<b>TOTAL MWH SALES</b>	12,399,768	12,337,634	12,113,300	12,078,600	12,081,100	12,127,000

# Water & Sewer System Base Case

DEBT SERVICE COVERAGE PROJECTIONS	Actual	Projection	Projection	Projection	Projection	Projection
OPERATING REVENUES:	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2020	Fiscal Year 2021	Fiscal Year 2022	Fiscal Year 2023
Water Sales	153,821,089	156,354,154	158,699,467	161,079,959	163,496,158	165,948,600
Sewer Sales	231,514,092	235,022,718	238,548,059	242,126,280	245,758,174	249,444,546
Reclaimed Sales	12,772,343	14,284,342	15,968,284	17,697,130	19,616,149	21,746,261
Environmental Sales	23,829,016	24,140,990	24,601,335	25,069,947	25,556,969	26,063,927
Franchise Fee Revenues	10,475,721	10,671,007	10,870,000	11,072,499	11,282,396	11,500,281
Uncollectibles	(589,900)	(859,604)	(875,634)	(891,947)	(908,855)	(926,407)
Capacity Fees	18,478,894	17,028,000	16,687,440	16,353,691	16,026,617	15,866,351
Extension Fees: Growth	9,519,430	8,772,000	8,596,560	8,424,629	8,256,136	8,173,575
Investment Income	7,096,822	3,526,635	3,526,635	3,526,635	3,526,635	3,526,635
Amounts Paid From Rate Stabilization Fund into Revenue Fund	16,127,966	51,744,507	25,536,309	25,551,219	25,551,219	25,551,219
Amounts Paid From Revenue Fund into Rate Stabilization Fund	(23,829,016)	(24,140,990)	(24,601,335)	(25,069,947)	(25,556,969)	(26,063,927)
Other Revenues net of Uncollectibles	11,830,747	9,201,514	9,298,290	9,396,034	9,494,755	9,594,463
<b>Total Operating Revenues</b>	<b>\$ 471,047,204</b>	<b>\$ 505,745,273</b>	<b>\$ 486,855,408</b>	<b>\$ 494,336,128</b>	<b>\$ 502,099,385</b>	<b>\$ 510,425,525</b>
<b>OPERATING EXPENSES:</b>						
Operations and Maintenance Expenses	149,646,476	160,701,533	164,643,512	168,223,699	171,884,353	175,627,284
Franchise Fee Taxes	10,475,723	10,671,007	10,870,000	11,072,499	11,282,396	11,500,281
<b>Total Operating Expenses</b>	<b>\$ 160,122,198</b>	<b>\$ 171,372,541</b>	<b>\$ 175,513,512</b>	<b>\$ 179,296,198</b>	<b>\$ 183,166,749</b>	<b>\$ 187,127,565</b>
<b>Net Revenues</b>	<b>\$ 310,925,005</b>	<b>\$ 334,372,732</b>	<b>\$ 311,341,896</b>	<b>\$ 315,039,930</b>	<b>\$ 318,932,635</b>	<b>\$ 323,297,960</b>
<b>OTHER DEDUCTIONS:</b>						
Debt Service: Principal	51,720,000	54,705,000	17,435,000	19,840,000	24,255,000	38,090,000
Debt Service: Interest	62,181,131	63,203,183	55,920,254	57,503,306	56,454,875	54,979,905
Less Interest on Build America Bond Subsidy	(2,493,760)	(2,494,629)	(2,481,117)	(2,458,248)	(2,452,384)	(2,447,854)
<b>JEA's Total Debt Service</b>	<b>\$ 111,407,371</b>	<b>\$ 115,413,554</b>	<b>\$ 70,874,138</b>	<b>\$ 74,885,058</b>	<b>\$ 78,257,491</b>	<b>\$ 90,622,051</b>
<b>Contribution to City</b>	<b>25,148,020.00</b>	<b>39,810,179.48</b>	<b>25,058,281.28</b>	<b>25,308,864.09</b>	<b>25,561,952.73</b>	<b>25,817,572.26</b>
<b>SENIOR AND SUBORDINATED DEBT SERVICE COVERAGE</b>	<b>2.79 x</b>	<b>2.9 x</b>	<b>4.39 x</b>	<b>4.21 x</b>	<b>4.08 x</b>	<b>3.57 x</b>
<b>FIXED COVERAGE</b>	<b>2.57 x</b>	<b>2.55 x</b>	<b>4.04 x</b>	<b>3.87 x</b>	<b>3.75 x</b>	<b>3.28 x</b>
<b>WATER SALES (KGALS)</b>	<b>36,186,559</b>	<b>36,731,993</b>	<b>37,282,973</b>	<b>37,842,217</b>	<b>38,409,850</b>	<b>38,985,998</b>
Growth Rate		1.5%	1.5%	1.5%	1.5%	1.5%
<b>SEWER SALES (KGALS)</b>	<b>26,340,622</b>	<b>26,737,291</b>	<b>27,138,350</b>	<b>27,545,426</b>	<b>27,958,607</b>	<b>28,377,986</b>
Growth Rate		1.5%	1.5%	1.5%	1.5%	1.5%
<b>RECLAIMED WATER SALES (KGALS)</b>	<b>3,118,695</b>	<b>3,407,289</b>	<b>3,730,522</b>	<b>4,062,375</b>	<b>4,430,731</b>	<b>4,839,606</b>
Growth Rate		9.3%	9.5%	8.9%	9.1%	9.2%

# District Energy System Five Year Financial Projections

## Net Revenues and Debt Service Coverage Ratios

District Energy System (\$000s)	Actual	2019	2020	2021	2022	2023
	2018					
Sales Revenue	\$8,757	\$8,578	\$8,578	\$8,578	\$8,578	\$8,578
Other Income	\$103	\$36	\$0	\$0	\$0	\$0
Rate Stabilization Transfer	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenue	\$8,859	\$8,614	\$8,578	\$8,578	\$8,578	\$8,578
Operating Expenses	\$4,603	\$4,575	\$4,696	\$4,621	\$4,743	\$4,668
Net Revenue	\$4,256	\$4,039	\$3,882	\$3,957	\$3,835	\$3,910
Total Debt Service	\$3,019	\$3,020	\$3,021	\$3,024	\$3,021	\$3,022
Debt Service Coverage	1.4x	1.3x	1.3x	1.3x	1.3x	1.3x

## Projected Funding Plan

District Energy System (\$000s)	Actual	2019	2020	2021	2022	2023
	2018					
Internal Funds <sup>1</sup>	\$1,233	\$1,018	\$862	\$933	\$814	\$889
Construction Fund <sup>2</sup>	\$0	\$2,053	\$488	\$850	\$334	\$51
Debt Financing <sup>3</sup>	\$0	\$0	\$0	\$0	\$202	\$410
Capital Plan	\$1,193	\$3,071	\$1,350	\$1,783	\$1,350	\$1,350
Principal Payments	\$1,660	\$1,690	\$1,725	\$1,770	\$1,815	\$1,870

<sup>1</sup>Internal funds are generated from R&R and operating capital outlay

<sup>2</sup>Draw down from the capital fund and the debt management strategy fund

<sup>3</sup>Drawing from revolving credit line



2018



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**RATING  
AGENCY**  
PRESENTATION

