

# Special Committee on the Future of JEA

## AGENDA

Thursday, May 10, 2018  
3:30 PM  
Council Chambers 1<sup>st</sup> 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 – Jordan Pope
    - Additional information on the ownership of the solar power generators with which JEA has power purchase agreements
    - Commercial and residential customers (in Jacksonville) who have facilities to generate their own solar power and what JEA pays them for net metering
    - Solar installation growth rates in recent years
    - Comparison of producing a kilowatt hour of power by JEA's large scale solar producers versus an individual customer's on-site installations



- **Map of solar installations in Jacksonville**
  - **Cost comparison of operating SJRPP versus closing SJRPP and generating power at Plant Vogtle**
  - **Response to whether capital projects could be grouped by type of use (routine maintenance, replacement of outdated facilities, etc.) so that the Council could better understand how the JEA prioritizes its capital needs and how priorities change from year to year.**
  - **Extrapolation of electric sales projections (for more than 5 years) to provide a longer-range perspective.**
  - **Discussion of, definitions and examples of the 6 utility diversification areas**
4. **Presentation by Jacksonville Civic Council – Michael Ward**
  5. **Public Comments**
  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, May 17, 2018 at 3:30 PM.**

JEA Action Items for 5-10-18 JEA Special Committee Meeting

Tab 12

- Council Member Crescimbeni – requested additional information on the ownership of the solar power generators with which JEA has power purchase agreements
- Council Member Hazouri asked for a list of what commercial and residential customers (names redacted) in Jacksonville have facilities to generate their own solar power and what JEA pays them for net metering
- Council Member Crescimbeni asked for solar installation growth rates in recent years
- Council Member Gulliford – what is the cost of producing a kilowatt hour of power by JEA’s large scale solar producers versus individual customer on-site installations
- Council Member Morgan – map solar installations in Jacksonville

Tab 2

- Comparison of the cost of operating SJRPP versus closing SJRPP and generating power at Plant Vogtle

Tab 6

- Council Member Boyer asked if the capital projects could be grouped by type of use (routine maintenance, replacement of outdated facilities, etc.) so that the Council could better understand how JEA prioritizes its capital needs and how priorities change from year to year.

Tab 8

- Council Member Boyer asked that the electric sales projections be extrapolated out for more than 5 years to give a longer-range perspective.

Tab 14

- Council Member Morgan - definitions and examples of the 6 utility diversification areas

### **Tab 12 Follow-up Information**

- Council Member Crescimbeni – requested additional information on the ownership of the solar power generators with which JEA has power purchase agreements
- Council Member Hazouri asked for a list of what commercial and residential customers (names redacted) in Jacksonville have facilities to generate their own solar power and what JEA pays them for net metering
- Council Member Crescimbeni asked for solar installation growth rates in recent years
- Council Member Gulliford – what is the cost of producing a kilowatt hour of power by JEA’s large scale solar producers versus individual customer on-site installations
- Council Member Morgan – map solar installations in Jacksonville

**JEA Solar Power Purchase Agreements**

<b>Project</b>	<b>Vendor</b>	<b>Location</b>	<b>Size</b>	<b>In-Service Date</b>	<b>PPA Term (yrs)</b>
Jacksonville Solar	PSEG/juwi	2009 Hwy 301 N, Jacksonville, FL 32224	12 MW	09/30/2010	30
NW JAX Solar Partners	EDF Renewables (formerly named groSolar)	2600 Arnold Rd Jacksonville, FL 32218	7 MW	5/30/17	25
Old Plank Rd Solar Farm	COX/PEC Velo	12850 Hance Ln Jacksonville, FL 32220	3 MW	10/13/17	20
SunPort Solar	NationalSolar	3838 Newcomb Rd Jacksonville, FL 32218	5 MW	Q4 2018	20
Blair Rd Solar	Hecate	1908 Blair Road, Jacksonville, FL 32221	4 MW	01/23/18	20
Simmons Rd Solar	InmanSolar	11300 Simmons Rd, Jacksonville, FL 32218	2 MW	01/17/18	20
Starratt Rd Solar	InmanSolar	14120 Webb Rd, Jacksonville, FL 32218	5 MW	12/20/17	20
Old Kings Solar	Mirasol	8321 Old Kings Rd. Jacksonville, FL 32219	1 MW	Q3 2018	20

# JEA Current and Future Solar Sites

## Current

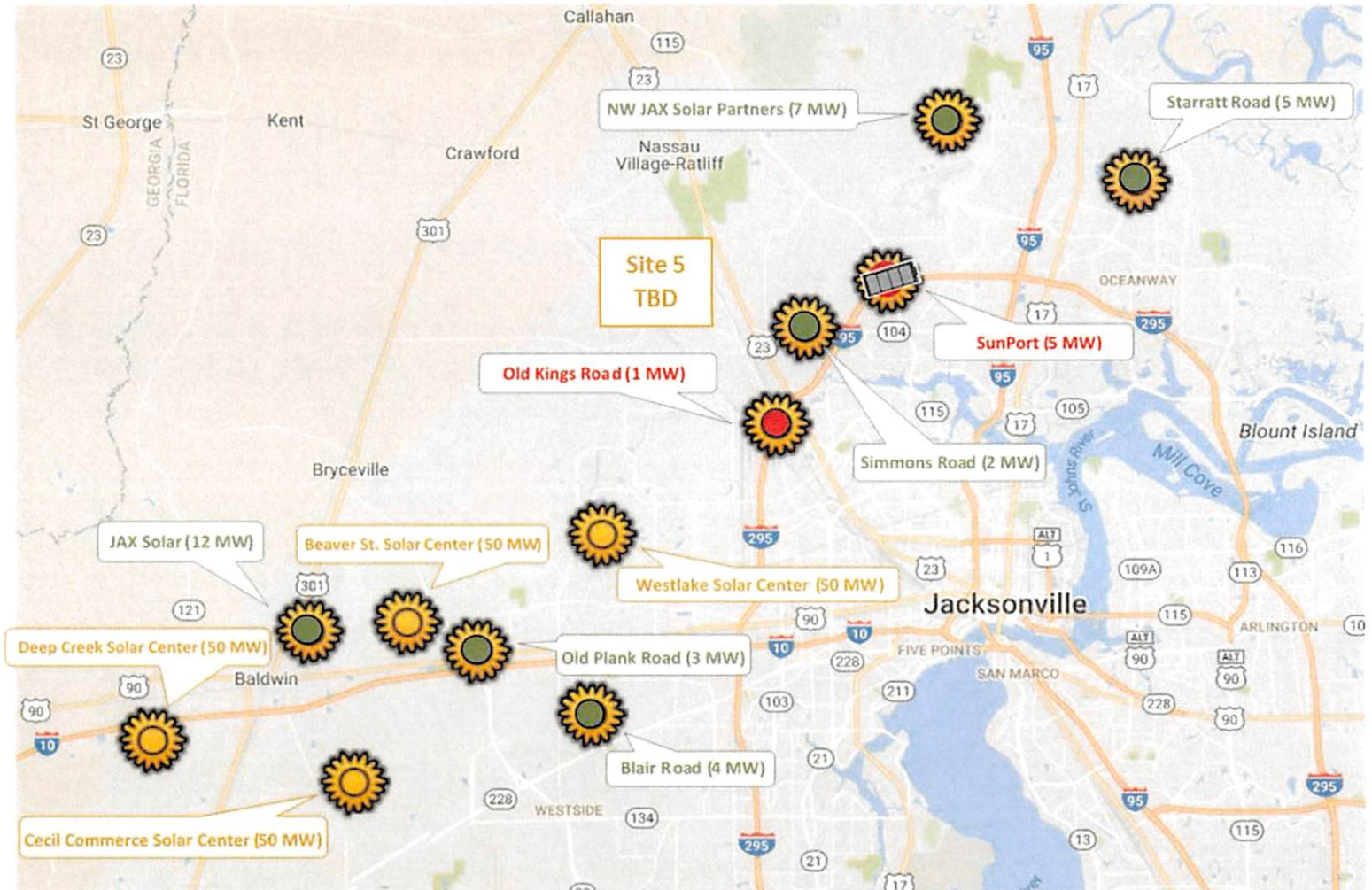
Jax Solar	12
NW Jax	7
Starratt	5
Old Plank	3
Simmons	2
Blair	4
<b>Total</b>	<b>33 MW</b>

## In Progress

Old Kings	1
Sun Port (Battery)	5
<b>Total</b>	<b>6</b>

## 2019-2020

Cecil	50
Deep Creek	50
Beaver	50
Westlake	50
5 <sup>th</sup> Site	50
<b>Total</b>	<b>250 MW</b>





**A list of what commercial and residential customers (names redacted) in Jacksonville have facilities to generate their own solar power and what JEA pays them for net metering:**

Commercial Private Solar - 59 JEA customers generate their own solar power

- 54 receive bill credits at \$0.103 per kWh.
- 5 customers with large generation systems receive bill credits at \$0.0325 per kWh.

Residential Private Solar - 1,436 JEA customers generate their own solar power

- 1,404 receive bill credits at \$0.103 per kWh
- 32 receive bill credits at \$0.0325 per kWh.

**Solar installation growth rates in recent years:**

**JEA Customer-Owned Solar per Year**

Year	Residential	Commercial	Total
< 2009	1	0	1
2009	16	4	20
2010	34	7	41
2011	10	4	14
2012	23	0	23
2013	32	9	41
2014	76	3	79
2015	207	0	207
2016	383	5	388
2017	407	21	428
2018	247	6	253
Total	1,436	59	1,495

**What is the cost of producing a kilowatt hour of power by JEA's large scale solar producers versus individual customer on-site installations:**

Cost to JEA to purchase power:

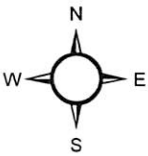
	Large Scale Solar PPAs (From 2015 Phase 1 and 2 Solar RFP)	New Large Scale Solar PPA (From 2018 Solar RFP)
Average \$/KWH	\$0.075	Below \$0.0325

Cost to JEA for energy sold back to system:

	Grandfathered Net Metering	New Distributed Generation
\$/KWH	\$0.103	\$0.0325

Actual cost to individual customers varies based on the cost of the customer's system. Energy consumed by customer from customer's system avoids purchasing from JEA.

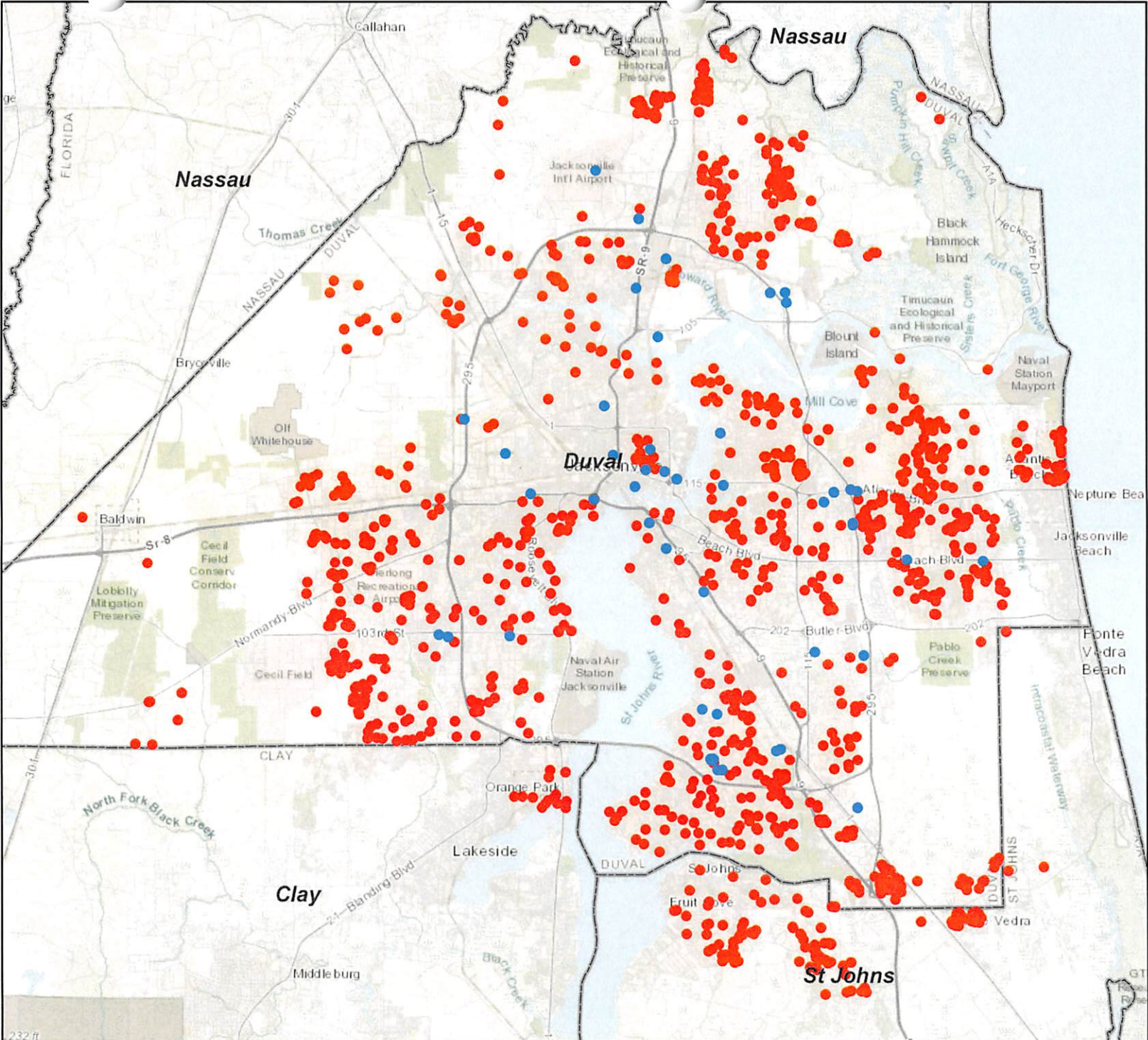
# Private Solar Customers



- Commercial
- Residential



0 13,000 26,000 Feet





## **Tab 2 Follow-up Information**

- Comparison of the cost of operating SJRPP versus closing SJRPP and generating power at Plant Vogtle

**Comparison of SJRPP Costs to Wansley PPA Costs**

<b>SJRPP</b>	<b>FY16</b>	<b>FY17</b>
Operating Cost	\$ 44,198,946	\$ 38,649,918
Fuel Cost	78,688,492	101,511,597
<b>Total Cost</b>	<b>\$ 122,887,437</b>	<b>\$ 140,161,515</b>

<b>Wansley</b>	<b>FY18</b>	<b>FY19</b>
Operating Cost	\$ 7,249,500	\$ 9,666,000
Fuel Cost	27,990,131	34,417,000
<b>Total Cost</b>	<b>\$ 35,239,631</b>	<b>\$ 44,083,000</b>

*Under the Joint Operating Agreement, the operating and fuel cost to JEA for SJRPP would have increased upon suspension of the PPA between FPL and JEA (FY19)*

### **Tab 6 Follow-up Information**

- Council Member Boyer asked if the capital projects could be grouped by type of use (routine maintenance, replacement of outdated facilities, etc.) so that the Council could better understand how JEA prioritizes its capital needs and how priorities change from year to year.

JEA Electric  
Capital Budget Prioritization

- **Safety**
  - Improve safety within JEA's electric system, for employees and the community.
- **Environmental/Regulatory**
  - Air Permits
  - NERC Reliability Standards
- **Renewal and Replacement (R&R)**
  - Using Enterprise Asset Management processes and systems, JEA monitors the age, health and condition of all Electric System assets in support of prioritizing future R&R investments. This insures continued safe, reliable and compliance operation of the system. Factors include:
    - Targeted storm hardening and reliability improvements.
    - Pole and line inspection, including infra-red inspection
    - Substation circuit breaker and transformer inspection and testing
    - Predictive maintenance for large rotating equipment (pumps, motors, turbines, etc.)
    - Non-destructive testing for power plant boilers
    - Replacement for end-of-life or obsolescence
- **Growth and Capacity**
  - JEA increases its installed system capacity based on future and planned growth within the electric service territory.
    - JEA typically builds one or two new substations annually
    - JEA provides on-going support for new developments and new individual services
- **Efficiency/Optimization**
  - Investments to achieve operational savings and/or improved reliability and resiliency
  - Capital improvements for increased generating unit fuel flexibility
  - Leverage information technology tools/systems
  - Improve process/systems in support of timely and effective customer outage communication/notification
- **Joint Participation projects – JTA, COJ, FDOT**
  - Required utility relocations
  - Renewal and replacement and/or increased capacity of electric system assets during road construction



JEA Water/Wastewater  
Capital Budget Prioritization

- Safety
  - Improve safety within JEA's water/wastewater system, for employees and the community.
- Environmental/Regulatory
  - Nitrogen reduction
  - Sanitary Sewer Overflow (SSO) Reduction
  - Reclaimed/Consumptive Use Permit (CUP) compliance
  - Odor Control
- Renewal and Replacement (R&R)
  - JEA monitors its water/wastewater system to prioritize infrastructure R&R for continued service reliability. Factors include:
    - Large diameter pipe program condition assessment
    - 20-year condition assessment for water and wastewater plants
    - Criticality for JEA's 1,400 sewer lift stations performed post-Hurricane Matthew
    - Specific field inspection and prioritization for top 50 / class IV pump stations
    - Inflow and Infiltration Assessments
    - Support Services – Fleet, Technology, Meters, Facilities
- Growth and Capacity
  - JEA increases its system capacity based on growth within the service territory. Capacity fees are collected to recover the cost of performing these improvements:
    - Construct and expand treatment (water/wastewater plants) capacity
    - Construct and expand transmission (large pipes) capacity
- Efficiency/Optimization
  - Capital investments to achieve operational savings
  - Information technology
  - Customer communication/notification improvements
- Joint Participation projects – JTA, COJ, FDOT
  - Required utility relocations
  - Renewal and replacement and/or increased capacity of pipe(s) during road construction for efficiency (proactive work in coordination with other community projects)

Project Title	FY19 Proposed	FY20 Proposed	FY21 Proposed	FY22 Proposed	FY23 Proposed	FY19-23 Total	County
<b>ELECTRIC CAPACITY</b>							
Unit B52 Advanced Gas Path Upgrade	27,798	0	0	0	0	27,798	Duval
Unit B53 Advanced Gas Path Upgrade	27,798	0	0	0	0	27,798	Duval
Solar Farm Interconnects	10,500	10,000	0	0	0	20,500	Duval
Dinsmore 230 - 26 kV Substation	8,826	2,869	0	0	0	11,695	Duval
New Electric Service Additions	8,600	8,600	9,100	10,000	10,500	46,800	All
GEC to Bartram 230 kV Circuit 909 Addition	7,888	1,692	0	0	0	9,580	Duval
Electric Development Driven Projects	7,000	6,500	6,500	6,500	6,500	33,000	All
Greenland 2X1 Combined Cycle Completion	5,000	10,000	150,000	250,000	118,000	533,000	Duval
Eagle 138 - 13.8 kV Substation	4,277	7,240	0	0	0	11,517	Duval
Bartram 230 kV Bay and Breaker Addition for Circuit 909	2,836	0	0	0	0	2,836	Duval
4kV Conversion - Fairfax and 21st and Hubbard	2,107	319	0	0	0	2,426	Duval
Nocatee 230 - 26 kV Substation	2,060	6,020	3,870	0	0	11,950	Duval
Electric Meters - Growth	1,649	1,679	1,740	1,709	1,709	8,486	All
Greenland Energy Center 230 kV Bay and Breaker Addition for Circuit 909	1,402	0	0	0	0	1,402	Duval
Eagle 138 - 13.8 kV Substation - Protection and Controls	1,086	71	0	0	0	1,157	Duval
Dinsmore 230 - 26 kV Substation - Protection and Controls	568	0	0	0	0	568	Duval
26KV Reconductor Circuit 417 - 418 - Woodley Rd from New Kings Rd to Old Kings Rd	504	243	0	0	0	747	Duval
Dinsmore Distribution Feeders	475	228	0	0	0	703	Duval
Greenland Energy Center - 230 kV Circuit 909 Interconnect	400	9	0	0	0	409	Duval
Bartram 230 kV Circuit 909 Interconnect	396	0	0	0	0	396	Duval
Nocatee 230 - 26 kV Substation - Protection and Controls	385	376	289	0	0	1,050	Duval
Nocatee Substation Distribution Feeders	370	580	300	0	0	1,250	Duval
Dinsmore 230 kV Circuit 937 Interconnect	240	206	0	0	0	446	Duval
Greenland Energy Center 230 kV Breaker for Circuit 909 - Protection and Controls	219	0	0	0	0	219	Duval
Eagle 138kV Circuit 847 Interconnect	60	408	0	0	0	468	Duval
Bartram 230 kV Bay and Breaker Addition for Circuit 909 - Protection and Controls	60	0	0	0	0	60	Duval
Nocatee 230 kV Circuit 917 Interconnect	28	67	105	0	0	200	Duval
4kV Rehabilitate – Distribution Projects	0	500	500	500	500	2,000	Duval
Potential Gas Line Capacity	0	0	1,500	3,000	0	4,500	Duval
Mayo Clinic 230 - 26kV Substation	0	0	0	1,000	6,000	7,000	Duval
Mayo Clinic 230 - 26kV Substation - Protection and Controls	0	0	0	150	700	850	Duval
Mayo Clinic Distribution Feeders	0	0	0	50	200	250	Duval
<b>ELECTRIC CAPACITY SUBTOTAL</b>	<b>122,532</b>	<b>57,607</b>	<b>173,904</b>	<b>272,909</b>	<b>144,109</b>	<b>771,061</b>	
<b>ELECTRIC RENEWAL &amp; REPLACEMENT</b>							
Electric Meters - 2-Way Meter Conversion	20,000	20,000	0	0	0	40,000	Duval
Electric Distribution Maintenance Capital Upgrades	12,500	12,500	13,000	13,500	14,000	65,500	All
System Average Interruption Duration Index (SAIDI) Improvement Plan	9,776	9,490	7,870	0	0	27,136	All
Brandy Branch - Advanced Gas Path Capital Improvements	8,419	0	0	0	0	8,419	Duval
Kennedy Combustion Turbine Unit 8 - Hot Gas Path Inspection	6,300	0	0	0	0	6,300	Duval
Brandy Branch - Units 2 and 3 Evaporator Replacement	5,766	0	0	0	0	5,766	Duval
Streetlight Improvements - Phase 2	5,500	0	0	0	0	5,500	Duval



Project Title	FY19 Proposed	FY20 Proposed	FY21 Proposed	FY22 Proposed	FY23 Proposed	FY19-23 Total	County
Northside Generating Station - Unit 1 and 2 Boilers - Gas Lance Installation	4,744	1,221	0	0	0	5,965	All
Northside - Units 1, 2, and 3 Capital Improvement Projects	4,000	6,000	6,000	6,000	6,000	28,000	Duval
Substation Repair and Replace Project - Transformer Replacements	3,800	1,400	1,400	1,400	1,400	9,400	All
CEMI-5 Electric Distribution Betterment	3,000	3,000	3,000	3,000	3,000	15,000	All
Northside Generating Station - Unit N36 Major Inspection FY2019	3,000	0	0	0	0	3,000	Duval
Northside Generating Station - Unit 3 Economizer Replacement	2,680	6,077	0	0	0	8,757	All
Joint Participation Electric Relocation Projects	2,600	2,500	2,500	2,500	2,500	12,600	All
Steam Plant General Capital Improvements	2,000	2,000	2,000	2,000	2,100	10,100	Duval
Brandy Branch - Greenland Energy Center - General Capital Improvements	2,000	2,000	2,000	2,000	2,100	10,100	Duval
Brandy Branch - Unit B54 Heat Recovery Steam Generator - Transition Duct	1,923	0	0	0	0	1,923	Duval
General Underground Network and Commercial Repair and Replace and Upgrades	1,900	1,900	1,900	1,900	1,900	9,500	All
500 kV Transmission Line Upgrades	1,800	1,800	0	0	0	3,600	All
Church St Feeders 181-186 13kV Reconductor from Substation to Riverside Ave	1,774	1,774	887	0	0	4,435	Duval
Pole Replacement Program	1,750	1,750	2,000	2,000	2,250	9,750	All
Electric Distribution System Improvements	1,624	1,637	1,650	1,664	1,664	8,239	All
Kennedy Substation Control Cable and Protection System Replacement	1,475	720	0	0	0	2,195	Duval
230kV Circuit 915 Partial Rebuild	1,142	0	0	0	0	1,142	Duval
Automatic Recloser Deployment	1,040	235	235	235	235	1,980	All
Distribution System - Pole Removal	1,000	1,000	1,000	1,000	1,000	5,000	All
Brandy Branch - Cooling Tower Fan Blades and Drift Eliminators - Replacement	1,000	0	0	0	0	1,000	Duval
Northside Generating Station - Units N01, N02 - EX2000 Digital Front End Upgrade	929	0	0	0	0	929	Duval
Transmission Lines Protection and Control Updates	900	900	0	0	0	1,800	Duval
Brandy Branch - Unit B51 Exhaust Stack Silencer Replacement	823	0	0	0	0	823	Duval
230 KV_ 138KV_ 69 kV Pole Refurbishment	800	300	300	300	300	2,000	All
Brandy Branch - Units B51, 52, 53 - Static Starter Digital Front End (DFE) Upgrade	773	0	0	0	0	773	Duval
26kV Feeder Circuit Breaker Replacement	754	754	754	754	754	3,770	All
Ritter Park 429 Reconductor	725	71	0	0	0	796	Duval
General Substation Improvements	700	700	700	700	700	3,500	All
Energy Management System - Distribution Management System Integration	700	0	0	0	0	700	Duval
Northside Generating Station - Units N01, N02 - Boiler Feed Pumps, Fans, Racks	694	0	0	0	0	694	Duval
Brandy Branch - Units B52, 53 - Main Steam Manual Gate Valve Replacement	650	0	0	0	0	650	Duval
Kennedy Unit 30 - Control Room Upgrade	618	20	0	0	0	638	Duval
Transmission Capacitor Bank Controls Replacement	610	468	0	0	0	1,078	Duval
230KV_ 138KV_ 69 kV Insulator Refurbishment	600	500	500	500	500	2,600	All
Northside Generating Station - Unit 1 Circulating Water Piping Replacement	580	1,493	0	0	0	2,073	Duval
Center Park Substation Protection Improvements	580	0	0	0	0	580	Duval
Northside Generating Station - Bed Ash Silos 1 and 2 Slurry Pump and Piping	557	0	0	0	0	557	Duval
Northside Generating Station - Unit N03 Condenser Inlet Valve Replacement	510	248	0	0	0	758	All
Underground Cable Replacement Program - Existing Developments	500	500	500	500	500	2,500	All
Brandy Branch - Units B51, 52, 53, 54 - EX2000 Digital Front End (DFE) Upgrade	500	0	0	0	0	500	Duval
Northside Generating Station - Units N33, N34, N35, N36 DCS Control System Upgrade	456	424	392	394	0	1,666	Duval
Northside Generating Station - Unit N00 Limestone Utilization Improvement	446	0	0	0	0	446	Duval
Northside Generating Station - Circulating Fluidized-Bed Boiler Simulator Replacement	444	848	0	0	0	1,292	Duval



Project Title	FY19 Proposed	FY20 Proposed	FY21 Proposed	FY22 Proposed	FY23 Proposed	FY19-23 Total	County
Pipe-Type Cable Replacements – Kennedy Circuit 682 and Hunter Rd Circuit 688	430	0	0	0	0	430	Duval
Bartram 298: Feeder Extension in Right of Way from Substation to Bartram Park Blvd	395	0	0	0	0	395	Duval
Northside Generating Station - Unit N02 Cyclone Crossover Expansion Joint Repair	389	424	0	0	0	813	Duval
Kennedy Generating Station - Unit K30 - SUS-3 480V Switchgear Modernization	336	0	0	0	0	336	Duval
Northside Generating Station - Unit 3 Reliability Improvements	300	1,868	0	0	0	2,168	Duval
General Distribution Improvements	300	300	300	300	300	1,500	All
General Transmission Improvements	300	300	300	300	300	1,500	All
Electric Meters - Replacement	300	225	300	300	300	1,425	All
General Protection System Improvements Transmission	300	150	150	150	150	900	All
(Reimbursable) Joint Project - Twin Creeks - SR210 - Electric	275	0	0	0	0	275	St Johns
Kennedy Combustion Turbine Unit 7 - Hot Gas Path Inspection	250	5,318	0	0	0	5,568	Duval
Northside Generating Station - Units N33, N34, N35, N36 Electrical Upgrades	243	220	220	220	0	903	Duval
Northside Generating Station - Units N01, N02 Battery Charger Replacement	241	87	0	0	0	328	Duval
Northside Generating Station - Units N01, N02 Seal Pot Air to Intrex Damper Upgrade	210	54	0	0	0	264	Duval
Northside Generating Station - Unit N03 Instrument Upgrade	205	109	0	0	0	314	All
Northside Generating Station - Unit N00 Fire Alarm Control Panel Upgrade	202	0	0	0	0	202	Duval
13kV Electric Distribution Network Improvements Placeholder	200	150	1,000	1,000	764	3,114	Duval
Capital Tools and Equipment - Electric	175	175	175	175	175	875	All
Energy Management System - EMS - Remote Terminal Units Upgrade Project	160	50	50	50	50	360	All
Northside Generating Station - Unit N03 River Water Booster Pump Replacement	147	454	0	0	0	601	All
Distribution Photovoltaic Project	125	0	0	0	0	125	All
General Transmission Improvements	100	100	100	100	100	500	All
Capital Tools and Equipment - Electric 1	80	80	80	80	80	400	All
Brandy Branch - Units B52, B53 Selective Catalytic Reduction Catalyst - Replacement	55	882	0	0	0	937	Duval
Electric Customer Service Response Tools and Equipment	55	55	55	55	55	275	All
Nocatee 230 kV Circuit 909 Interconnect	30	67	105	0	0	202	Duval
Northside Generating Station - Unit N03 Condenser Waterbox Liner Replacement	14	1,145	0	0	0	1,159	All
Bartram 298: Feeder Extension to Bartram Park Blvd - Protection and Controls	10	0	0	0	0	10	Duval
Units B52, B53 Advanced Gas Path Upgrade - Spare Parts	0	20,000	0	0	0	20,000	Duval
Streetlight Improvements - Phase 3	0	5,500	4,400	0	0	9,900	Duval
Substation Repair and Replace Projects	0	3,000	3,000	3,000	3,000	12,000	All
Transmission Repair and Replace Projects	0	2,500	2,500	2,500	2,500	10,000	All
230kV Breaker Replacement	0	1,600	1,600	1,600	0	4,800	Duval
Compression Upgrade to Baldwin-Brandy Branch	0	1,000	6,000	0	0	7,000	Duval
Park and King 4kV Substation Rebuild	0	1,000	1,000	1,000	0	3,000	Duval
230kV Breaker Replacement - Protection and Controls	0	320	320	160	160	960	Duval
Park and King 4kV Substation Rebuild - Protection and Controls	0	100	100	200	0	400	Duval
Park and King 4kV Distribution Feeder Getaway Rebuild	0	50	100	50	0	200	Duval
St Johns 4kV Substation Rebuild	0	0	1,000	1,000	1,000	3,000	Duval
St Johns 4kV Substation Rebuild - Protection and Controls	0	0	100	100	200	400	Duval
St Johns 4kV Distribution Feeder Getaway Rebuild	0	0	50	100	50	200	Duval
Greenland Combustion turbine Unit 1 - Hot Gas Path Inspection	0	0	0	300	5,845	6,145	Duval
Brandy Branch Combustion Turbine 2 - Hot Gas Path Inspection	0	0	0	250	5,745	5,995	Duval



FY19-23 Electric

Project Title	FY19 Proposed	FY20 Proposed	FY21 Proposed	FY22 Proposed	FY23 Proposed	FY19-23 Total	County
Brandy Branch Combustion Turbine 3 - Hot Gas Path Inspection	0	0	0	250	5,745	5,995	Duval
Mayo Clinic 230/26kV Substation Interconnects	0	0	0	12	290	302	Duval
<b>ELECTRIC RENEWAL &amp; REPLACEMENT SUBTOTAL</b>	<b>133,189</b>	<b>131,513</b>	<b>71,593</b>	<b>53,599</b>	<b>67,712</b>	<b>457,606</b>	
<b>SUPPORT SERVICES - ELECTRIC</b>							
General Administration Office Building	28,604	20,477	0	0	0	49,081	Duval
TS - Projects - Electric	18,300	10,245	12,585	10,245	13,325	64,700	Duval
Capital Administrative Overhead- Electric	9,750	9,750	9,750	9,750	9,750	48,750	Duval
Fleet - Replacement - Electric	7,295	7,949	7,430	7,956	7,432	38,062	All
New Operations Center (South)	6,500	15,000	0	0	0	21,500	Duval
Westside Service Center - Administrative and Warehouse Space	2,627	0	0	0	0	2,627	Duval
Commonwealth Service Center - Interior and Roof Upgrades	2,000	3,000	0	0	0	5,000	Duval
Facilities Security - Electric	620	620	620	620	620	3,100	All
Facilities Roof Replacement - Electric	450	450	450	450	450	2,250	All
Facilities Heating, Ventilation, and Air - Electric	430	430	430	430	430	2,150	All
Facilities Improvements - Building Upgrades - Electric	425	425	200	200	200	1,450	All
Fleet - Expansion - Electric	251	0	0	0	0	251	All
Facilities - Paving and Site Improvements - Electric	250	250	250	250	250	1,250	All
Energy Management System - Base Upgrade Project	225	130	130	130	130	745	All
Facilities Improvements - Lighting - Electric	200	200	100	100	100	700	All
Facilities Improvements - Elevators - Electric	190	50	50	50	50	390	All
Facilities Generators - Electric	175	0	0	0	175	350	Duval
Westside Service Center - Paving Upgrades	135	0	0	0	0	135	Duval
Security - Fencing - Electric	130	130	130	130	130	650	All
Facilities Improvements, Plumbing and Fire System Upgrades - Electric	100	100	100	100	100	500	All
Northside Generating Station - Training Center	85	785	1,436	0	0	2,306	Duval
Laboratory Equipment Upgrades - Electric	75	75	75	75	75	375	All
Utility Locate Group - Capital Equipment - Electric	50	50	50	50	50	250	All
Commonwealth Service Center Drainage and Parking Issues	0	462	0	0	0	462	Duval
Southside Service Center - HVAC Safety Restroom and Door Upgrades	0	0	2,000	0	0	2,000	Duval
<b>SUPPORT SERVICES - ELECTRIC SUBTOTAL</b>	<b>78,867</b>	<b>70,578</b>	<b>35,786</b>	<b>30,536</b>	<b>33,267</b>	<b>249,034</b>	
<b>GRAND TOTAL</b>	<b>334,588</b>	<b>259,698</b>	<b>281,283</b>	<b>357,044</b>	<b>245,088</b>	<b>1,477,701</b>	
<b>County Summary</b>							
<b>Row Labels</b>	<b>Sum of FY19 Proposed</b>						
All	82,279						
Duval	252,034						
St Johns	275						
<b>Grand Total</b>	<b>334,588</b>						



Project Title	FY19 Proposed	FY20 Proposed	FY21 Proposed	FY22 Proposed	FY23 Proposed	FY19-23 Total	County
<b>WATER &amp; SEWER CAPACITY</b>							
Bradley Road Pump Station Improvements	8,834	9	0	0	0	8,843	Duval
Gate Pkwy - Glen Kernan to T-Line - Transmission - New	5,994	358	0	0	0	6,352	Duval
Main St Water Treatment Plant - 1st St to Franklin St - Transmission	5,228	1,492	0	0	0	6,720	Duval
Blacks Ford Water Reclamation Facility - Expansion	4,000	0	0	0	0	4,000	St Johns
E 1st St Main St to E 4th St - Raw Water - New	2,785	695	0	0	0	3,480	Duval
Greenland Water Treatment Plant - Expansion	2,610	2,225	0	0	0	4,835	St Johns
T - Line - JTB to Town Center Pkwy - Transmission - New - Force Main	2,542	0	0	0	0	2,542	Duval
Greenland Wastewater Treatment Plant	2,522	20,000	27,000	30,000	0	79,522	Duval
Cecil Treatment Plant - Ground Storage Tank and High Service Pump	2,460	1,396	0	0	0	3,856	Duval
Water Meter Growth	2,250	2,350	2,450	2,030	2,030	11,110	All
Greenland - GEC to US-1 - Transmission - Force Main	2,215	0	0	0	0	2,215	Duval
Nassau Reclaim Water Main - Radio Av to Harts Rd - Transmission - Reclaim	1,968	0	0	0	0	1,968	Nassau
Bartram - US1 - Old St Augustine Rd to US 1	1,791	3,670	0	0	0	5,461	St Johns
Development Driven Projects - Water	1,667	500	500	500	500	3,667	All
Nassau Regional Water Reclamation Facility - Expansion	1,653	9,616	12,211	12,211	4,600	40,291	Nassau
Development Driven Projects - Reclaim	1,627	400	400	400	400	3,227	All
District 2 - Pulaski Rd Booster Wastewater Pump Station	1,617	750	0	0	0	2,367	Duval
Greenland - Burnt Mill Pump Station to Greenland Energy Center - Force Main	1,530	2,944	5,369	3,800	0	13,643	Duval
Arlington East Water Reclamation Facility - Secondary Clarifier Addition	1,519	0	0	0	0	1,519	Duval
Development Driven Projects - Sewer	1,360	200	200	200	200	2,160	All
District 2 - T-Line to Busch Dr - Transmission - New - Force Main	1,143	0	0	0	0	1,143	Duval
Deerwood - Southside Blvd Intertie to Deerwood III Water Treatment Plant	1,000	3,700	7,500	8,000	7,350	27,550	Duval
(Reimbursable) - COJ - Riverview Watermain Phase 2	932	0	0	0	0	932	Duval
Nocatee South RW Storage Tank and Booster PS - Reclaim	909	3,469	100	0	0	4,478	St Johns
Tredinick Pkwy - Millco Rd to Mill Creek Rd - Transmission - Reclaim	883	0	0	0	0	883	Duval
Nassau - Radio Av - Reclaim Water Storage Tank and Booster Pump Station	855	2,226	0	0	0	3,081	Nassau
Southwest Wastewater Treatment Plant Expansion	800	2,700	4,500	19,761	23,300	51,061	Duval
5th St W - Imeson Rd to Melson Ave - Transmission - New - Force Main	791	3,090	1,819	0	0	5,700	Duval
RiverTown - New Water Treatment Plant	760	3,600	6,207	1,424	0	11,991	St Johns
Main Extensions and Taps – Water	750	750	750	750	750	3,750	All
Main Extensions and Taps – Sewer	725	725	725	725	725	3,625	All
Ponce De Leon Wastewater Treatment Facility - Package Treatment Plant	677	0	0	0	0	677	St Johns
Twin Creeks Reclaim Water Storage Tank and Booster Pump Station - Reclaim	643	2,388	0	0	0	3,031	St Johns
CR210 - South Hampton to Ashford Mills - Transmission - Reclaim	551	50	0	0	0	601	St Johns
Nassau - Radio Ave - Class III/IV - New Pumpstation	500	500	1,800	0	0	2,800	Nassau
District 2 - 14491 Duval Rd - Class III/IV - Pump Upgrade	500	0	0	0	0	500	Duval
Westlake Water Treatment Plant - Well No 4 and Reclaim Water Main	495	1,930	526	0	0	2,951	Duval
Blacks Ford and Ponte Vedra Temporary Treatment Plant	481	1,025	0	0	0	1,506	St Johns
Large Diameter Pipe Program - CR210 Booster Pump Station Pipeline and Force Main Cleaning	450	0	0	0	0	450	Duval
Development Driven Projects - Pump Stations	435	750	750	750	750	3,435	All
Baymeadows Rd - Point Meadows Rd to Old Still - Transmission - Reclaim	355	0	0	0	0	355	Duval
Gate Parkway to Burnt Mill Rd - Transmission - Reclaim	347	1,527	0	0	0	1,874	Duval
US 1 - Greenland Water Reclamation Facility to CR 210 - Transmission	300	3,180	8,690	4,127	0	16,297	Duval
Monterey - 3254 Townsend Rd - Class III/IV - Pump Upgrade	282	158	727	1,357	1,357	3,881	Duval
Monterey - 5838 Pompano - Class III/IV - Pump Upgrade	276	151	1,056	1,574	0	3,057	Duval
Mandarin - 8331 Princeton Sq - Class III/IV - Pump Upgrade	250	250	1,000	0	0	1,500	Duval
Grid - Cost Participation - New - Reclaim	250	250	500	500	500	2,000	All
Grid - Cost Participation - New - Force Main	250	250	500	500	500	2,000	All



Project Title	FY19 Proposed	FY20 Proposed	FY21 Proposed	FY22 Proposed	FY23 Proposed	FY19-23 Total	County
Grid - Cost Participation - New - Water	250	250	250	250	250	1,250	All
Pages Dairy Rd - Felmor Rd to Chester Ave - Transmission - Water Main	208	566	4,071	1,200	0	6,045	Nassau
Mandarin - 8751 Bayleaf Dr - Class III/IV - Pump Upgrade	186	337	671	1,315	1,316	3,825	Duval
Mandarin - 9247 Baymeadows Rd - Class III/IV - Pump Upgrade	172	142	275	542	542	1,673	Duval
William Burgess Rd - SR200 to Harts Rd - Transmission - New - Force Main	104	0	0	0	0	104	Nassau
St Johns River Water Managment District - Alternative Water Supply - Pilot Plant	100	2,700	4,200	0	0	7,000	Duval
(Reimbursable) - William Burgess Rd - SR200 to Harts Rd - Transmission - New - Reclaim	50	0	0	0	0	50	Nassau
(Reimbursable) - Monument Rd - Cancun Dr to Hidden Hills Ln - Transmission - New - Reclaim	50	0	0	0	0	50	Duval
District 2 - Main St to Pulaski Rd - Transmission - Force Main	38	0	0	0	0	38	Duval
Ridenour WTP - Storage and Repump - Reclaim	0	2,000	1,460	2,040	0	5,500	Duval
T-Line - Park Ave to Pulaski Rd Master Pump Station - Easement Acquisitions	0	500	0	0	0	500	Duval
T-Line - Brandy Branch to Beaver St - Dist - New - Force Main	0	360	1,300	3,190	0	4,850	Duval
District 2 - New Berlin Rd - Yellow Bluff Rd to Eastport Rd - New - Force Main	0	330	1,260	2,784	0	4,374	Duval
(Reimbursable) - RG Skinner - North Rd - Transmission - Reclaim	0	300	1,080	1,620	0	3,000	Duval
N Main St Dr - Setzer Rd to Gun Club Rd - Transmission - New - Water	0	280	1,100	2,382	0	3,762	Duval
Monterey - 7732 Merrill Rd - Class III/IV - Pump Upgrade	0	250	750	0	0	1,000	Duval
Monterey - 8043 Carlotta Rd - Class III/IV - Pump Upgrade	0	250	750	0	0	1,000	Duval
Mandarin - 4181 Lavista Cr - Class III/IV - Pump Upgrade	0	250	750	0	0	1,000	Duval
Southwest - 1060 Ellis Rd - Class III/IV - Pump Upgrade	0	250	500	0	0	750	Duval
Old Middleburg Rd - Argyle Forest Blvd to Maynard Pl - Transmission - New - Force Main	0	250	350	1,712	1,000	3,312	Duval
Cisco Dr - Westlake Water Treatment Plant to Garden St - Transmission - New	0	220	850	1,895	0	2,965	Duval
Trout River Blvd - US1 to Sibald Ave - Transmission - New - Water	0	150	580	1,296	0	2,026	Duval
T-Line - Amelia Concourse to Amelia National - Transmission - Reclaim	0	144	510	146	0	800	Nassau
Pritchard Rd - Old Plank Rd to Cisco Dr West - Transmission - New - Water	0	140	540	1,196	0	1,876	Duval
St Johns Bluff Rd - UNF to Bradley Master Pump Station - Transmission - Rehabilitate Parallel Force Main	0	100	300	1,000	2,570	3,970	Duval
Deerwood Pk - Burnt Mill to JTB - Transmission - New - Force Main	0	80	310	712	0	1,102	Duval
Greenland - Southside Blvd - Deerwood 3 to Greenland	0	50	3,000	7,540	7,450	18,040	Duval
RiverTown Water Treatment Plant - Reclaim - New Storage and Pumping System	0	50	400	1,000	2,500	3,950	St Johns
Westlake Water Treatment Plant - Expansion	0	50	150	500	2,000	2,700	Duval
Deercreek Club Rd - Southside Blvd to Waterton Lane - Distribution - New - Force Main	0	12	144	249	0	405	Duval
Old Middleburg Rd - Maynard Pl to Shindler Dr - New - Force Main	0	0	935	0	0	935	Duval
US1 Booster Pump Station - Old St Augustine Rd to US1 Booster Pump Station	0	0	675	1,588	5,486	7,749	Duval
Mandarin - 106 Twin Creeks - Class III/IV - Pump Upgrade	0	0	500	0	0	500	Duval
Arlington East - 420 Tresca Rd - Class III/IV - Pump Upgrade	0	0	500	0	0	500	Duval
118th St - Kinkaid Rd to Ricker Rd - Transmission - New - Force Main	0	0	350	1,000	2,049	3,399	Duval
Veterans Pkwy - Longleaf Pine Pkwy to CR210 - Transmission	0	0	300	3,000	4,000	7,300	St Johns
District 2 Water Treatment Facility - Rapid Infiltration Basin - Transmission and Pumping	0	0	300	3,000	4,000	7,300	Duval
CR210 - Twin Creeks to Russell Sampson Rd - Transmission - Reclaim	0	0	300	1,080	1,620	3,000	St Johns
CR210 - Longleaf Pine Pkwy to Ashford Mills Rd - Transmission - Reclaim	0	0	250	2,050	2,700	5,000	St Johns
Ft. Caroline Rd - McCormick Rd to Fulton Rd - Distribution - New	0	0	210	805	1,785	2,800	Duval
Greenbriar Rd - Longleaf Pine Pkwy to Spring Haven Dr - Transmission - Reclaim	0	0	200	1,320	1,980	3,500	St Johns
Russell Sampson Rd - Sewert. Johns Pkwy to CR210 - Transmission - Reclaim	0	0	200	920	1,888	3,008	St Johns
Ridenour - Cortez to Ridenour Water Treatment Plant - New - Water	0	0	200	800	3,000	4,000	Duval
Nocatee South Water Repump	0	0	200	800	3,000	4,000	St Johns
Large Diameter Pipe Program - District 2 - Wateroodley to Key Haven - Transmission - Force Main	0	0	190	0	0	190	Duval
New World Av - Waterworks Ave to Chaffee Rd - Transmission - New - Water	0	0	0	500	500	1,000	Duval
Chaffee Rd - Westmeadows Dr S to Samaritan Wy - Transmission - New - Water	0	0	0	500	226	726	Duval
SR200 - William Burgess Blvd to Police Lodge Rd - Transmission - Reclaim	0	0	0	300	2,100	2,400	Nassau
Clay County Utility Authority (CCUA) - Southwest Wastewater Treatment to CCUA - Transmission - Reclaim	0	0	0	300	1,400	1,700	Duval



Project Title	FY19 Proposed	FY20 Proposed	FY21 Proposed	FY22 Proposed	FY23 Proposed	FY19-23 Total	County
Jones Rd - Teague Rd to Prichard Rd - Transmission - New - Water	0	0	0	250	1,000	1,250	Duval
District 2 - Yellow Bluff Rd - New Berlin Rd to Victoria Lakes - Transmission - New - Force Main	0	0	0	177	936	1,113	Duval
Oakridge - Saints Rd - Sewer Johns Bluff to Oakridge Water Treatment Plant	0	0	0	140	538	678	Duval
Lenox Ave - Fouraker Rd to Palisades Dr - Distribution - New - Force Main	0	0	0	115	461	576	Duval
CR210 - St Johns Pkwy to Leo Maguire Pkwy - Transmission - New - Reclaim	0	0	0	100	409	509	St Johns
Southeast - T-Line to Southeast Water Treatment Plant - Water	0	0	0	50	1,290	1,340	Duval
Station Creek Rd - Beach Blvd to Hunt Club Rd N - Transmission - New - Reclaim	0	0	0	50	225	275	Duval
Bartram Trail High School - Longleaf Pine Pkwy - Transmission - New - Reclaim	0	0	0	50	195	245	St Johns
US-1 - Twin Creeks Master Pump Station to Alphons St - Transmission - Force Main	0	0	0	0	300	300	St Johns
Large Diameter Pipe Program - Busch Dr - Balmoral Dr to Harts Rd - Transmission - Force Main	0	0	0	0	20	20	Duval
<b>WATER &amp; SEWER CAPACITY SUBTOTAL</b>	<b>73,920</b>	<b>89,285</b>	<b>116,141</b>	<b>140,073</b>	<b>101,698</b>	<b>521,117</b>	
<b>WATER &amp; SEWER RENEWAL &amp; REPLACEMENT</b>							
Resiliency - Pump Stations, Plants, Electrical Reliability	18,000	19,800	19,800	19,800	15,000	92,400	All
West Grid - Lenox to Timuquana - Force Main and Pump Station Improvements	7,905	100	0	0	0	8,005	Duval
US1 South Water Repump Facility	6,785	1,850	0	0	0	8,635	St Johns
Buckman Biosolids Conversion - Process Facility	5,288	9,616	12,224	0	0	27,128	Duval
Argyle Forest Booster Station and Related Stations Upgrades	4,739	100	0	0	0	4,839	Duval
Water Delivery System Repair and Replacements	4,400	4,100	4,400	4,400	4,400	21,700	All
Blount Island Fire Protection System	4,300	0	0	0	0	4,300	Duval
Buckman Disinfection System Replacement	3,638	3,300	0	0	0	6,938	Duval
Water Meter Replacement	3,400	3,200	3,200	6,500	6,500	22,800	All
Large Diameter Pipe Program - Walnut St Trunkline Replacement	3,220	3,843	0	0	0	7,063	Duval
Wastewater Treatment Facilities - Capital Equipment Replacement	3,140	2,500	2,500	2,500	2,500	13,140	All
Sewer Collection System Repair and Replacements	2,800	2,500	2,800	2,800	2,800	13,700	All
Pumping Stations - Capital Equipment Replacement	2,600	2,500	2,500	2,500	2,500	12,600	All
Lakeshore Water Treatment Plant - Reservoir Rehabilitation	2,271	1,401	0	0	0	3,672	Duval
Woodmere Water Treatment Plant - Well No 3 and Storage Tank Replacement	2,033	0	0	0	0	2,033	Duval
Sewer Collection System - Trenchless Repair and Replace	2,000	2,000	2,000	2,000	2,000	10,000	Duval
Pumping Stations - Class I/II Station Rehabilitation	1,900	1,900	1,900	1,900	1,900	9,500	All
4511 Spring Park Rd Lift Station	1,831	1,000	0	0	0	2,831	Duval
Large Water Meter Replacement	1,820	1,925	2,030	0	0	5,775	All
Buckman Water Reclamation Facility - Blower System Improvements	1,800	1,500	0	0	0	3,300	Duval
Large Diameter Pipe Program - Gravity Sewer Replacement	1,800	1,400	1,800	1,600	2,000	8,600	Duval
District 2 - Robena Rd Booster Wastewater Pump Station	1,698	350	0	0	0	2,048	Duval
Nassau Regional Water Treatment Plant - Well No 3	1,540	0	0	0	0	1,540	Nassau
Large Diameter CIPP - Program	1,500	1,500	1,500	1,500	1,500	7,500	All
Air Release Valve Replacement - Program	1,500	1,500	1,500	1,500	1,500	7,500	All
Buckman Water Reclamation Facility - Aeration Basin Header and Diffuser Replacement	1,500	1,500	1,400	1,470	0	5,870	Duval
Southwest - 6217 Wilson Bv - Class III/IV	1,494	1,553	0	0	0	3,047	Duval
Ponte Vedra Blvd 6" Cast Iron Replacement	1,479	0	0	0	0	1,479	St Johns
Well Rehabilitation and Maintenance - McDuff Wells	1,396	0	0	0	0	1,396	Duval
Otter Run Water Treatment Plant Renewal and Replacement	1,363	0	0	0	0	1,363	Nassau
Joint Participation Projects - Water	1,300	700	700	700	700	4,100	All
Supervisory Control and Data Acquisition (SCADA) Remote Terminal Units and Control Panel Upgrades	1,200	1,200	1,200	1,500	1,500	6,600	All
Well Rehabilitation and Maintenance - Fairfax Wells	1,188	0	0	0	0	1,188	Duval
Large Diameter Pipe Program - Bernita St Force Main Replacement: Macy Ave to Monterey	1,112	0	0	0	0	1,112	Duval
Biosolids Process Renewal and Replacement	1,100	800	800	740	740	4,180	All



Project Title	FY19 Proposed	FY20 Proposed	FY21 Proposed	FY22 Proposed	FY23 Proposed	FY19-23 Total	County
Southwest - 4881 Timuquana Rd - Class III/IV	1,083	1,101	0	0	0	2,184	Duval
Joint Project - JTA - 8th St Water Main Replacement - Mt Herman St to Boulevard St	1,032	0	0	0	0	1,032	Duval
McDuff Water Treatment Plant - High Service Pump Replacement	1,007	1,167	0	0	0	2,174	Duval
Galvanized Pipe Replacement - Program	1,000	2,000	2,000	2,000	2,000	9,000	Duval
Large Diameter Pipe Program - Southwest Service Area Infiltration and Inflow Analysis and Remediation	1,000	2,000	1,000	0	0	4,000	Duval
Sewer Pipeline CrossiNorthside Generating Station Resiliency - Program	1,000	1,000	1,000	1,000	1,000	5,000	All
Arlington East Water Reclamation Facility Upgrades - Aeration Basin and Blowers	956	3,342	5,397	3,493	0	13,188	Duval
Lofton Oaks Water Treatment Plant Improvements	942	550	0	0	0	1,492	Nassau
RG Skinner - 9B to Parcels 10A - 11 - Reclaim	914	0	0	0	0	914	Duval
Norwood Water Treatment Plant High Service Pump	897	735	0	0	0	1,632	Duval
District 2 - 11308 Harts Rd - Class III/IV	871	520	0	0	0	1,391	Duval
Southwest - 5104 118th St - Class III/IV	851	4,947	0	0	0	5,798	Duval
Buckman - 5307 Buffalo Ave - Class III/IV	837	1,818	1,000	0	0	3,655	Duval
South Grid Water Quality - Well Improvement	827	92	0	0	0	919	Duval
RG Skinner - 9B to T-Line - Reclaim	826	0	0	0	0	826	Duval
Large Diameter Pipe Program - Ductile Iron Force Main Replacement	780	1,020	500	3,000	3,000	8,300	Duval
Southwest Water Reclamation Facility - Screening Conveyance and Grit Removal System Replacement	748	0	0	0	0	748	Duval
1638 Talleyrand Av - Class III/IV	717	0	0	0	0	717	Duval
Water Treatment Plant Reservoir Repair and Replace	700	100	100	100	100	1,100	All
Ponce De Leon Water Treatment Plant - Well No 2 Replacement	682	628	0	0	0	1,310	St Johns
Integrated Water Supply Testing Evaluation and Rehabilitation (iWATER)	652	0	0	0	0	652	Duval
Water Treatment Plants - Sodium Hypochlorite Storage Tank Upgrades	640	440	440	440	440	2,400	Duval
Large Diameter Pipe Program - Arlington East Water Reclamation Facility - Parallel Sludge Transfer Line	600	1,200	1,200	0	0	3,000	Duval
Joint Project - COJ - Lower Eastside Drainage (First St - APR Blvd to Van Buren)	600	218	0	0	0	818	Duval
103rd St Water Main Replacement - Cecil Commerce Ctr Pkwy to Aviation Ave	590	3,300	1,200	0	0	5,090	Duval
Buckman Biosolids Conveyor System Replacement	565	0	0	0	0	565	Duval
Julington Creek Wastewater Treatment Facility - Influent Structure Rehabilitation	554	0	0	0	0	554	St Johns
Ponte Vedra Water Reclamation Facility - Filter Addition	536	322	0	0	0	858	St Johns
Collins Rd, Whispering Pines Dr to Blanding Blvd - Force Main Replacement	515	0	0	0	0	515	Duval
7703 Blanding Bv - Class III/IV	512	512	0	0	0	1,024	Duval
Jammes Rd - Wilson Blvd to Harlow Blvd	512	4	0	0	0	516	Duval
Joint Project - COJ - Lower Eastside Drainage Improvements (First St - APR Blvd to Van Buren) - Sewer	504	177	0	0	0	681	Duval
Large Diameter Pipe Program - South Shores Sub-Aqueous Force Main Rehabilitation	500	3,700	3,750	0	0	7,950	Duval
Water Plant Capital Renewal and Replacement	500	1,000	1,000	1,000	1,000	4,500	All
Bartram Repump Station Potable Water Storage Tank	497	0	0	0	0	497	Duval
Mandarin Water Reclamation Facility - Expansion Joint Replacement	491	1,303	0	0	0	1,794	Duval
Emory Circle - From Cornell Rd along Rollins Ave and Tulane Ave to Emory Circle	488	95	0	0	0	583	Duval
Arlington East Water Reclamation Facility Upgrades - Odor Control	470	3,886	796	0	0	5,152	Duval
Large Diameter Pipe Program - Palm Avenue Water Main Replacement	458	0	0	0	0	458	Duval
Well Field Repair and Replace	450	450	700	700	700	3,000	All
Nassau Regional Water Reclamation Facility - Tank 2 Membrane Replacement	450	0	0	0	0	450	Nassau
Boulevard St Water Main Replacement - 7th St to 11th St	435	0	0	0	0	435	Duval
Joint Participation Projects - Sewer	400	400	400	400	400	2,000	All
Julington Creek Water Treatment Plant - Storage Tank Rehabilitation	400	0	0	0	0	400	Duval
Julington Creek Wastewater Treatment Facility - Electrical Grounding	391	0	0	0	0	391	Duval
Arlington East Water Reclamation Facility Upgrades - Influent Structure	375	3,384	348	0	0	4,107	Duval
Joint Project - JTA - Alta Drive Roadway Improvements - Water	355	20	0	0	0	375	Duval
District 2 Water Reclamation Facility - Hypochlorite Feed System Replacement	348	432	0	0	0	780	Duval
Large Diameter Pipe Program - McMillan and Kinlock Pump Stations Force Mains Upgrade	337	0	0	0	0	337	Duval



Project Title	FY19 Proposed	FY20 Proposed	FY21 Proposed	FY22 Proposed	FY23 Proposed	FY19-23 Total	County
Buckman Water Reclamation Facility - Secondary MCC 19A and 19B Replacement	331	0	0	0	0	331	Duval
Main St Water Treatment Plant - Ozone Generator - Addition	312	1,640	1,000	0	0	2,952	Duval
Turberculated Iron Gravity Pipe - Repair and Replacement	300	300	300	300	500	1,700	All
District II Water Reclamation Facility Primary Clarifier No. 2 and 3 Rehabilitation	296	2,332	253	0	0	2,881	Duval
Owens Rd - Ranch Rd to Max Leggett Pkwy - New - Water	288	1,272	0	0	0	1,560	Duval
Ponte Vedra Water Reclamation Facility - Access Platform Addition and Handrail Replacement	278	0	0	0	0	278	St Johns
King St and Shircliff Way Water Main Replacement	269	0	0	0	0	269	Duval
District 2 Water Reclamation Facility - Blowers and UV Emergency Power	266	2,272	0	0	0	2,538	Duval
Main St Water Treatment Plant - Well No 15 - New Lower FI Aquifer Well	261	0	0	0	0	261	Duval
Wastewater Odor Control - All Plants and Pump Stations	250	250	250	250	250	1,250	All
Buckman Biosolids Conversion - Operations/Maintenance/Warehouse and Pump Shop Facility	207	163	524	2,104	1,500	4,498	Duval
Buckman Biosolids Conversion - Gas Scrubber, Electric Generator, Load Transformer, and Circuit	199	2,209	255	0	0	2,663	Duval
Joint Project - JTA - Alta Drive Roadway Improvements - Sewer	198	20	0	0	0	218	Duval
Large Diameter Pipe Program - Pepsi Place Water Main Replacement	187	0	0	0	0	187	Duval
Arlington East Water Reclamation Facility - Replace Auto-Transfer Switch	184	0	0	0	0	184	Duval
Joint Project - JTA - Alta Drive Roadway Improvements - Reclaim	180	20	0	0	0	200	Duval
Supervisory Control and Data Acquisition (SCADA) Renewal and Replacement	150	150	150	150	150	750	All
Southwest Water Reclamation Facility - Upgrade Aeration Blowers	150	0	0	0	0	150	Duval
Diesel-driven Backup Pump Repair and Replace	100	100	100	100	100	500	All
Waste Water Pumping Station Safety Improvements - Guard Rail Installation	100	100	100	100	100	500	All
Large Diameter Pipe Program - Herschel St Pump Station Force Main Replacement: Herschel St to Challen	80	0	0	0	0	80	Duval
Air Relief Valves Repair and Replace	70	70	70	70	50	330	All
Joint Project - FDOT - (SR111) Cassat Ave - Lenox Ave to Blanding Blvd - Water	57	0	0	0	0	57	Duval
Joint Project - FDOT - SR 200 (A1A) Rubin to O'Neil Scott - Section 3 - Water	55	0	0	0	0	55	Nassau
St Johns Forest Wells	50	1,000	500	0	0	1,550	St Johns
Reuse Delivery Repair and Replace	50	50	50	50	50	250	All
Manhole - Supervisory Control and Data Acquisition (SCADA) - Repair and Replace	50	50	50	50	50	250	All
Reuse Facility - Capital Equipment Replacement	50	50	50	50	50	250	All
Mandarin Road Loop Connection - Transmission - New - Water Main	39	489	347	0	0	875	Duval
Joint Project - FDOT - SR 200 (A1A) I-95 to Still Quarters Rd - Section 1 - Sewer	39	3	0	0	0	42	Nassau
8431 Springtree Rd - Class III/IV	38	438	0	0	0	476	Duval
Joint Project - JTA - Collins Rd - Water	36	28	0	0	0	64	Duval
Joint Project - FDOT - SR 200 (A1A) Rubin to O'Neil Scott - Section 3 - Sewer	30	0	0	0	0	30	Nassau
Joint Project - FDOT - SR 9B - Duval - St Johns County Line to CR2209 - Reclaim	21	0	0	0	0	21	Duval
Joint Project - FDOT - SR 200 (A1A) I-95 to Still Quarters Rd - Section 1 - Water	9	3	0	0	0	12	Nassau
Joint Project - FDOT - Pecan Park Rd - I-95 - Water	9	0	0	0	0	9	Duval
Joint Project - JTA - Collins Rd - Sewer	8	0	0	0	0	8	Duval
District 2 - 10800 Key Haven Bv - Class III/IV	5	1,441	0	0	0	1,446	Duval
103rd St - Pressure Sustaining Valve - Addition	0	2,150	0	0	0	2,150	Duval
District 2 Effluent Outfall Land Acquisition	0	1,100	0	0	0	1,100	Duval
Large Diameter Pipe Program - Water Transmission Replacement	0	850	4,500	3,200	4,200	12,750	Duval
Wastewater Treatment Plant Large Capital Improvements	0	500	1,050	2,980	18,845	23,375	All
Water Treatment Plant Large Capital Improvements	0	150	8,700	4,800	16,250	29,900	All
Southeast Water Treatment Plant Ground Storage Tank	0	50	2,000	500	0	2,550	Duval
Beacon Hills Ground Storage Tank	0	50	750	0	0	800	Duval
Main St Water Treatment Plant - Wells 7 and 12 Lining	0	50	250	0	0	300	Duval
District 2 - 10340 Woodley Pump Station - Pump Modifications	0	0	100	0	0	100	Duval
Oakridge Water Treatment Plant High Service Pump Expansion	0	0	50	300	1,500	1,850	Duval
Brierwood Water Treatment Plant High Service Pump Expansion	0	0	50	300	1,500	1,850	Duval



FY19-23 WaterSewer

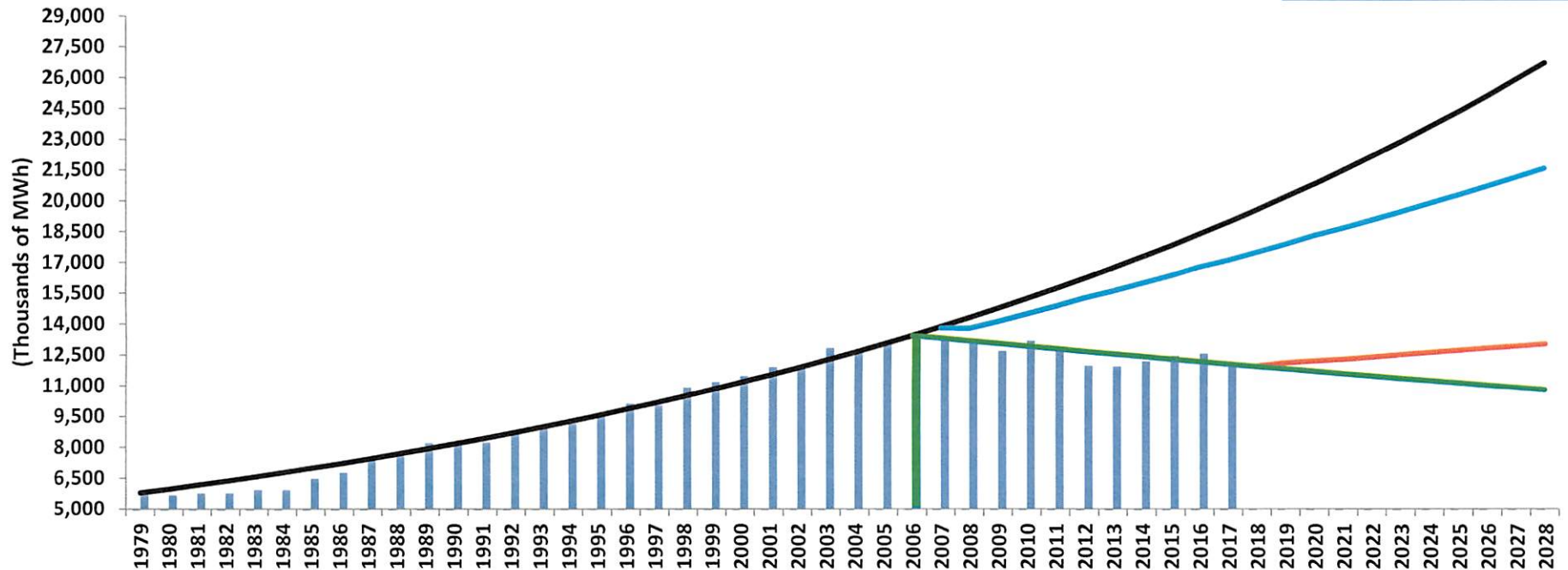
Project Title	FY19 Proposed	FY20 Proposed	FY21 Proposed	FY22 Proposed	FY23 Proposed	FY19-23 Total	County
Royal Lakes Water Treatment Plant High Service Pump Expansion	0	0	0	50	300	350	Duval
Lovegrove High Service Pump and Building Replacement - Expansion	0	0	0	50	40	90	Duval
Buckman Water Reclamation Facility - Bio-Nutrient Reduction - Phase 2	0	0	0	0	3,000	3,000	Duval
<b>WATER &amp; SEWER RENEWAL &amp; REPLACEMENT SUBTOTAL</b>	<b>142,037</b>	<b>134,851</b>	<b>104,534</b>	<b>78,947</b>	<b>102,615</b>	<b>562,984</b>	
<b>SUPPORT SERVICES - WATER</b>							
Technology Services - Water	12,100	6,530	8,390	6,830	8,050	41,900	Duval
Capital Administrative Overhead - Water	5,200	5,200	5,200	5,200	5,200	26,000	All
Fleet - Replacement - Water	4,428	4,605	5,231	4,905	4,931	24,100	All
Buckman - New Administration Building	3,611	0	0	0	0	3,611	Duval
Facilities Generators - Water	2,310	2,435	4,835	3,715	4,505	17,800	All
Facilities Security - Water	635	635	635	635	635	3,175	All
Facilities Heating, Ventilation, and Air - Water	520	520	520	520	520	2,600	All
Buckman Water Reclamation Facility - Street Lighting and Paving Upgrades	500	0	0	0	500	1,000	Duval
JEA Tower - Building Renovations	500	0	0	0	0	500	Duval
Facilities Roof Replacement - Water	400	400	435	435	435	2,105	All
Facilities Improvements, Building Upgrades - Water	400	400	400	400	400	2,000	All
Facilities Improvements, Electric and Lighting Systems	300	400	400	400	400	1,900	All
Fleet - Expansion - Water	279	1	1	1	1	283	All
Facilities Improvements and Plumbing Upgrades	275	250	250	250	250	1,275	All
Facilities - Paving and Site Improvements - Water	250	250	250	250	250	1,250	All
Mandarin Water Reclamation Facility - Facility Parking and Storage Building	200	2,000	0	0	0	2,200	Duval
Southwest Water Reclamation Facility - Facility Buildings 1 and 3 Upgrades	196	1,415	0	0	0	1,611	Duval
Real Estate Services - Easement Location and Acquisitions	150	150	150	150	150	750	All
Security - Fencing - Water	100	100	100	100	100	500	All
Laboratory Equipment Upgrades - Water	100	100	100	100	100	500	All
Utility Locate Group - Capital Equipment - Water	50	50	50	50	50	250	All
<b>SUPPORT SERVICES - WATER SUBTOTAL</b>	<b>32,504</b>	<b>25,441</b>	<b>26,947</b>	<b>23,941</b>	<b>26,477</b>	<b>135,310</b>	
<b>GRAND TOTAL</b>	<b>248,461</b>	<b>249,577</b>	<b>247,622</b>	<b>242,961</b>	<b>230,790</b>	<b>1,219,411</b>	
<b>County Summary</b>							
<b>Row Labels</b>	<b>Sum of FY19 Proposed</b>						
All	73,791						
Duval	142,118						
Nassau	9,766						
St Johns	22,786						
<b>Grand Total</b>	<b>248,461</b>						

### **Tab 8 Follow-up Information**

- Council Member Boyer asked that the electric sales projections be extrapolated out for more than 5 years to give a longer-range perspective.

# JEA Electric Sales

Revised to show 10 year projection – May 2018



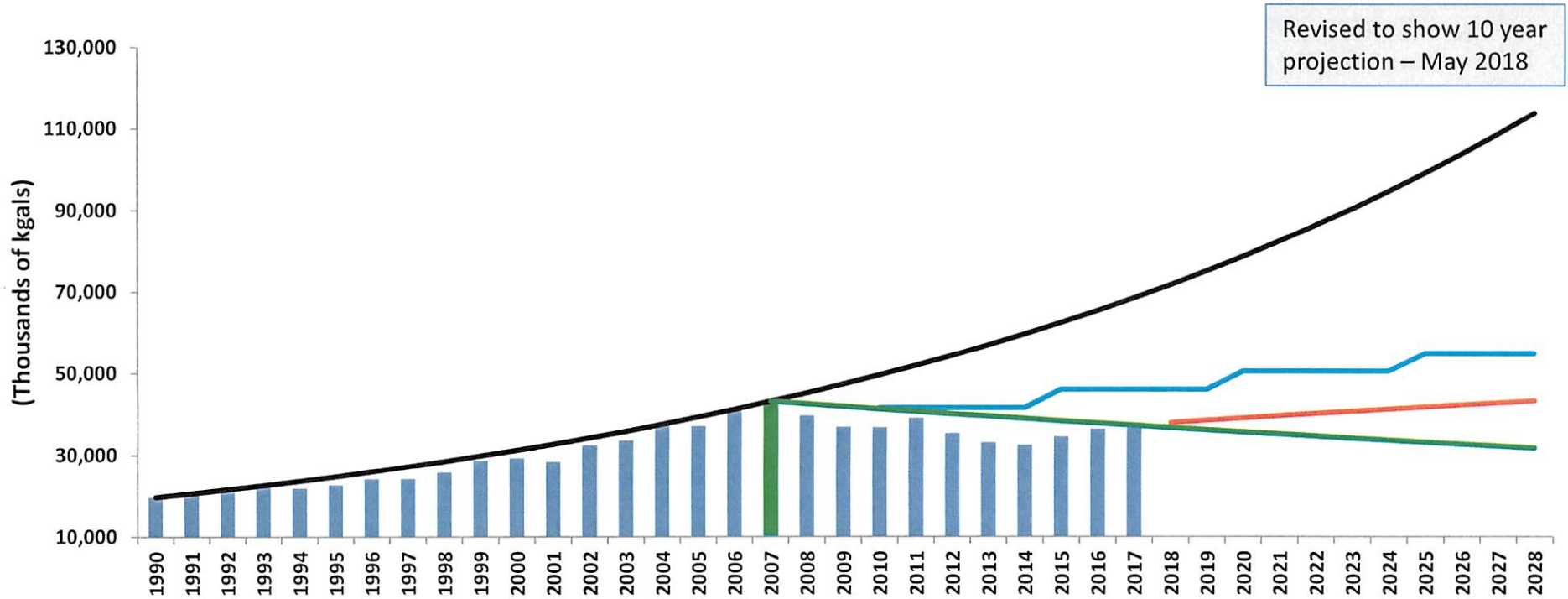
- Projection based on Annual Growth Rate 1979-2006
- 2006 Sales Projection (IRP-Based)
- 2017 Sales Projection (TSP-Based)
- Projection Based on Annual Growth Rate 2006-2017



IRP = Integrated Resource Plan  
TSP = Ten Year Site Plan



# JEA Water Sales



- Projection based on Annual Growth Rate 1990-2007
- 2008 Sales Projection based on Water Resource Master Plan
- 2017 Sales Projection based on Water Resource Master Plan
- Projection based on Annual Growth Rate 2007-2017





**Tab 14 Follow-up Information**

- Council Member Morgan - definitions and examples of the 6 utility diversification areas

## How are other utilities diversifying?

Other utilities are diversifying through building unregulated energy related businesses. These businesses include:

- Energy marketing

Southern Power, a subsidiary of Southern Company, is a leading U.S. wholesale energy provider meeting the electricity needs of municipalities, electric cooperatives, investor-owned utilities and other energy customers. JEA has entered into a 2 year PPA with Southern Power for 200 MW at Plant Wansley in Georgia. Southern Power and its subsidiaries own or have the right to own 48 facilities operating or under construction in 11 states with more than 12,800 MW of generating capacity in Alabama, California, Florida, Georgia, Maine, Minnesota, Nevada, New Mexico, North Carolina, Oklahoma and Texas.

Southern Power regulated utility subsidiaries include Georgia Power and Alabama Power.

- Oil and natural gas gathering and processing infrastructure

Sempra LNG & Midstream, a subsidiary of Sempra Energy, develops liquefied natural gas (LNG) facilities, midstream natural gas infrastructure and natural gas storage.

Sempra Energy regulated utility subsidiaries include San Diego Gas & Electric.

- Renewable energy development

NextEra Energy Resources, a subsidiary of NextEra Energy, is a diversified clean energy company with an emphasis on power generating and energy services. They construct and operate power projects to produce electricity, and then market that electricity to wholesale customers. They also invest in critical infrastructure for power delivery and offer energy-related products and services to customers across the country. They currently operate more than 16,000 MW of wind and solar generation in North America.

NextEra Energy's regulated utility subsidiary is Florida Power & Light.

- Distributed generation companies

Constellation, a subsidiary of Exelon, offers many distributed generation energy solutions:

- Combined heat and power (CHP) generators – provides design, implementation, commissioning, long-term ownership, O&M and fuel procurement. Used primarily in industrial applications to produce/capture energy from manufacturing processes.
- Fuel cells – provides installation for data centers and retains ownership and O&M responsibility; customer pays for the electricity/heat produced
- Batteries – provides installation while retaining ownership and O&M responsibility; customer signs a power contract

Exelon regulated utility subsidiaries include Atlantic City Electric, Baltimore Gas & Electric and ComEd.

- LNG terminals

See bullet 2 regarding Sempra LNG & Midstream

- Telecom (fiber/cell tower)

Gainesville Regional Utilities (GRU), under the umbrella GRUCom, offers:

- INTERNET SOLUTIONS: High-capacity, high-speed Internet services for businesses, office parks and multi-dwelling residential communities
- DATA TRANSPORT AND NETWORKING: Metro Ethernet and Private Line TDM/SONET platforms to help extend the reach of networks
- COLOCATION DATA CENTER: Private, climate-controlled facility for securely housing an organization's data and networking equipment
- CELLULAR CARRIER AND WIRELESS SERVICES: Fiber-optic-backhaul and tower-leasing solutions for wireless service providers

GRU is a municipal utility in Gainesville, FL.



## Special Committee on JEA Analytic Framework

1. **What is the question?** “What is the optimal use and structure of JEA, an important city asset?” This analysis will consider the impact on community stakeholders, including but not limited to customer service, financial efficiency, and community support. Emphasize this isn’t a question with a binary answer – sell or keep. There are a number of other options.
2. **What is JEA?** Provide a brief overview of the enterprise. Distinguish among power generation, power transmission and distribution, water, wastewater, etc. Provide a summary of the balance sheet and income statement.
3. **How does JEA currently support the City?** Briefly summarize the current contributions JEA makes in terms of financial support. Include an analysis of franchise fee, general fund contribution, subsidies, economic development, and other contributions to the city.
4. **What is JEA really worth if it was sold?** Start with the PFM indicated net, identify the major additional costs that need to be resolved (pension liability, Plant Vogtle, current and future environmental liability, etc.), reduce that to PV estimates and come up with a likely range of net value. Emphasize this is just an estimate. Implicit in this analysis is an understanding of the age of JEA’s infrastructure and investment in alternative fuels.
5. **What would change if JEA were sold?** The utility would behave like a for-profit company that is owned by an even larger for-profit company. It would be a responsible corporate citizen, and it probably would be effectively run. There are likely to be changes to several factors in the event of a sale, including: rates, customer service, response time, economic investment and contributions to the City. We will also analyze the impact of the loss of local control and accountability to citizens. We must analyze the impact of a sale on economic development and business recruitment/retention in the region. Specifically, we will analyze the potential impact on high energy using industries, such as manufacturing, technology, logistics and aviation.
6. **What are the other options?** Briefly discuss other alternatives. Manage balance sheet more efficiently to extract ~\$1B of capital, hybrid ownership models, service agreements, etc. Each having advantages and disadvantages.
7. **Timeline for Disposition.** Develop a comprehensive timeline for disposition of JEA including an analysis of all steps that must occur before and during a possible disposition.



## Special Committee on JEA Analytic Framework

8. **How should the City proceed?** Develop a straightforward process with a timeline. For starters:
- a) Study and comprehensively describe the asset. What do we have? How does each part work? What are the long-term capital needs? Perform a fuel-mix analysis.
  - b) Evaluate management effectiveness at JEA. Is the asset being effectively run?
  - c) Consider the long-term future of electric utilities. Specifically, how will the electric industry change over the next generation and how would a sale impact response to industry changes?
  - d) Study ALL alternatives in detail. Make sure the community is completely informed of all options
  - e) Undertake a formal appraisal. Figure out what the asset is really worth, as a whole and by component parts
  - f) Develop a process to determine the best option to pursue
  - g) Recommend criteria for the potential sale of JEA. These criteria will include, but are not limited to, contingent liability analysis, environmental liability, economic development impacts, inclusion of a buy-back clause, rate freezes, and employee retention
9. **Sale Proceeds.** Should the city elect to sell JEA or make changes to JEA's operating model, any proceeds should be the subject of a separate analysis based on the needs of the city. Use of the proceeds is outside the scope of this study.

**Conclusion.** JEA is the single most valuable asset the city has or ever will have. Deciding what to do with it requires a comprehensive, ordered process, as fact-based and free from politics as possible, and transparent to the citizens who own JEA. A thoughtful and thorough analysis takes time and we will work on this as quickly and diligently as possible.



## OFFICE OF THE CITY COUNCIL

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JACKSONVILLE, FLORIDA  
32202

May 10, 2018

Mr. G. Alan Howard, Esq.  
Chairman of the Board  
JEA  
21 West Church Street  
Jacksonville, Florida 32202

Dear Chairman Howard:

I have received numerous inquiries regarding the selection of Mr. Aaron Zahn as Interim CEO of JEA, particularly regarding: the haste with which he was selected, the lack of discussion amongst the Board members regarding his selection, the lack of experience he possesses in the utility industry, and the issues that have surfaced regarding Mr. Zahn's prior business dealings.

I am hoping you might answer some questions to bring clarity and transparency to the Interim CEO selection process that will enable me to understand, as well as assist in responding to the inquiries I am fielding on a daily basis. Those questions are:

1. Does JEA have a documented CEO selection process and/or documented CEO qualifications?
2. Are there standard operating procedures regarding employee screening practices at JEA?
3. Between Mr. Zahn's resignation from the Board on Friday, April 13, 2018 and his selection as Interim CEO on Tuesday, April 17, 2018, what employee screening activities did JEA conduct?
4. Were any employee screening activities for Mr. Zahn conducted before Friday, April 13, 2018?
5. Is there any documentation of the meetings between Mr. Aaron Zahn and the JEA Board members between Friday, April 13, 2018 and his selection as Interim CEO on Tuesday, April 17, 2018?
6. Were you made aware of Mr. Zahn's intention to resign and/or seek the interim CEO role by anyone prior to Friday, April 13, 2018? If so, by whom and when?
7. Since naming Mr. Zahn as JEA's Interim CEO, what employee screening activities has JEA conducted?
8. Was Mr. Zahn subjected to a background check?
9. What other vetting or verification procedures did JEA employ to evaluate the accuracy of Mr. Zahn's resume?
10. What reference checks did JEA make regarding Mr. Zahn?

I thank you for your consideration of this request and I look forward to your assistance.

Sincerely,

Anna Lopez Brosche

cc: Honorable John R. Crescimbeni  
Chairman, Special Committee on the Future of JEA