FY2024

JEA OPERATING AND CAPITAL BUDGET



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STRATEGIC PATH & INTEGRATED PLANNING

JEA leadership and Board of Directors developed the current strategic path consisting of a mission and vision to improve lives, build community, and become the best utility in

the nation. This is to be accomplished by leading with the values of safety, respect and integrity and focusing on three strategic areas: Developing an Unbeatable Team, Delivering Business Excellence, and Earning Customer Loyalty. The four pillars of Foster and Exceptional Work Culture, Deepen Customer and Community Engagement, Plan for the Future, and Make Doing Business with JEA Easy were established with specific strategic objectives laying a path forward to accomplish the mission and vision.

The JEA corporate scorecard and associated business unit scorecards with established key performance indicators (KPIs) are presented to the Board of Directors monthly to ensure focus is kept on organizational activities. These scorecards also receive a comprehensive review and refinement annually by leadership and staff and directly correlate to the accomplishment of the

JEA. FY24 Corporate Performance Scorecard							Data through: 12/31/2023			
Metric Category	FY23 EOY Value	FY24 Quartile Benchmark Goal	Quartile Target Value	FY24 Quartile YTD	FY2	24 Value YTD	12-Month Trend	Metric Scorecard	Notes	
Unbeatable Team										
Safety - Lost Time Incident Rate (LTIR)	.31	1st	.40	1st		.18		C	\mathcal{O}	
Employee Engagement (GLINT)	80	1st	74	1st		80			\mathcal{O}	
Customer Loyalty										
Customer Satisfaction - Residential	714	2nd	705	2nd		728			\mathcal{O}	
Customer Satisfaction - Commercial	777	2nd	779	1st		785	/		\mathcal{O}	
Business Excellence										
Electric Reliability (SAIDI)	61.4	1st	70.0	1st		63.56			\mathcal{O}	
Water Reliability - Pressure <30 PSI (avg. min.)	5.2	1st	2.8	1st		.84			\mathcal{O}	
Wastewater Reliability - Sanitary Sewer Overflows	.52	1st	.55	1st		.14			\mathcal{O}	
Total Spend - Variance	1.0%		+/-5%			-12.4%			\mathcal{O}	
Total Customer Bill (avg. monthly)	\$210.41	1st	\$224.92	1st		\$203.00			\mathcal{O}	
Clean Energy Composition	4%		10%			11%			\bigcirc	

Upon review, leadership will also make minor adjustments to the current set of Strategic Objectives on an annual basis if necessary. This is part of JEA's overall integrated planning process.



STRATEGIC AREAS OF FOCUS

Our Goal: to be the best utility in the nation

JEA team members are committed to three major strategic areas of focus and embracing the core values that define who we are and what we do.

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SAFETY	R
We put the physical	We treat of
people first, both at	perspectiv
and away from work.	bring out th
	Aur Strato

Developing an UNBEATABLE TEAM

Delivering **BUSINESS EXCELLENCE**

because we know employees that are treated well will treat our customers well

Foster an

EXCEPTIONAL

WORK CULTURE

Employee Engagement

Diversity, Equity &

Inclusion

because we are serious about serving as good stewards of the resources our customers rely on

Our Strategic Objectives

Deepen **CUSTOMER &** COMMUNITY ENGAGEMENT

Reasonable Rates Sound Business Decisions **Economic Development Customer Solutions Stakeholder Relationships Environmental Stewardship**

Values

ESPECT

thers with courtesv ct, seeking diverse es and helping to ne best in everyone.

INTEGRITY

We place the highest standard on ethics and personal responsibility, worthy of the trust our customers and colleagues place in us.

Our Strategic Focus Areas

Earning **CUSTOMER LOYALTY**

because our customers count on us for delivering affordable, reliable services

Plan for the FUTURE

Employee Development Long-term Workforce Plan **New Business Opportunities Integrated Resource Plan Resilient & Reliable** Infrastructure

Make Doing **BUSINESS WITH JEA EASY**

Technology, Tools & Data **Governance & Policy** Review

LEADERSHIP TEAM

BOARD OF DIRECTORS



















Dr. Zachary Faison, Jr. President & CEO, Edward Waters University



Kawanza Humphrey Chief Human Resources Officer, VyStar Credit Union



Morales Construction Co. Inc.















THE HISTORY OF JEA

Established by the City of Jacksonville in 1895, JEA owns, operates, and manages the electric system. It grew from a department of city government to an independent authority created by the



consolidation of city and county governments in 1967.

On June 1, 1997, the water and sewer systems operated by the city since 1880 also became part of JEA's utility service offerings. It was fitting that this merger took place as the Main Street Light Plant was built at the city's Waterworks Park at First and Main streets.

Today, JEA is the largest community-owned utility in Florida and one of the largest in the United States. We are committed to our purpose-to improve the quality of life in the

communities we serve, with a spirit that has united our business for more than 125 years.



JEA owns and operates an Electric System with four generating plants, and all transmission and distribution facilities, including 744 circuit miles of transmission lines and 7.336 miles of distribution lines.

JEA also purchases energy from eight solar photovoltaic sites located across our service territory. We will continue to increase our investment in renewable energy sources as part of our electric Integrated Resource Plan, a long-term plan to ensure the sustainability of our grid and to support our community's continued growth for years to come. The goals of the IRP are in less than a decade our power supply portfolio will be 35% clean energy, we will retire less efficient generating assets, we will use 100% clean energy to serve JEA facilities, and we will increase and enhance energy efficiency programs to offset growing demand. By 2030, these goals will result in an 80% reduction in JEA's overall carbon emissions since 2005.

Over four decades ago, JEA made a commitment to produce electricity with a diverse fuel source. Diversity in fuel mix is very important in providing reliable, economical and environmentally-sound electricity.

In the 1970s, JEA produced electricity using just one type of fuel: oil. In 1973, the oil embargo caused the price of oil to quadruple. This led JEA to embracing a strategy of fuel diversification. For many years following, JEA customers benefited from the production of electricity using solid fuel. Solid fuel was a more economical fuel compared to oil and natural gas. That started to change in 2012 as the price of natural gas dropped from increasing production of natural gas from shale deposits. Since then, JEA has taken advantage of the lower natural gas costs by using more natural gas sourced generation.

JEA currently has a diverse generation fleet fueled by natural gas, solid fuel, solar, biomass, nuclear, wholesale purchase power, and oil for backup.

This diversity of JEA's fleet provides flexibility to adjust electric production based on fuel economics. The savings from generating power at the lowest cost are passed on to our customers.

JEA now has a diverse generation fleet by using solid fuel, natural gas and some solar, biomass, biogas and nuclear. This allows JEA to produce electricity based on economics. And these savings are passed on to our customers.

ELECTRIC

Brandy Branch Generating Station



The Brandy Branch Generating Station (BBGS) houses three natural gas combustion turbines and has a heat recovery steam generator to recover excess heat from two of the turbines (called combined-cycle). This allows JEA to produce nearly 50 percent more electricity with no additional fuel costs and virtually no new emissions. Total site capacity is approximately 770 MW in the summer and 830 MW in the winter.

The Northside Generating Station (NGS) uses natural gas, fuel oil, biomass, coal and petroleum coke in three large steam units and four small diesel-powered peaking units to produce more than 1300 MW of peak electric capacity. NGS boasts two of the largest Circulating Fluidized Bed Combustors (CFBs) in the world that are both clean and fuel-diverse, affording JEA the flexibility to utilize the most economic fuel choices while still achieving exceptional emission levels. NGS is also among the cleanest solid fuel plants in the world.

Northside Generating Station



Kennedy Generating Station



The Kennedy Generating Station uses natural gas with diesel fuel as backup, in two large combustion turbines. Power for Jacksonville has been produced at the KGS site since 1912. Of course, the units in service today are not nearly that old. The two units in operation today were installed in 2000 and 2009. Total site capacity today is approximately 350 MW in the summer and 380 MW in the winter.



gas turbines provide electricity with a low air emission output, and are also capable of using ultra-low sulfur diesel as a backup fuel. In the future, conversion to a combined-cycle unit will allow for increased output production and improved efficiency by using heat already produced during the process.

JEA has been bringing solar energy to Jacksonville since the 1990s. Today, JEA has approximately 39 MW of solar throughout Jacksonville. JEA is embarking on a major expansion that will increase our current solar energy portfolio. JEA is planning to add four new local solar farms, providing nearly 300 MW of solar powermaking Jacksonville one of the leading solar cities in the nation. As part of our IRP Goals, JEA's system will benefit from increased amounts of solar generation resources.



Greenland Energy Center began operation in 2011. Located in the southern Jacksonville, it is JEA's first new generation site south and east of the St. Johns River in more than 50 years. It will assist in meeting our customers' future electricity needs and significantly improve electric reliability during peak load periods. Like KGS, the GEC facility uses natural gas in two large combustion turbines to generate approximately 350 MW in the summer and 380 MW in the winter. The clean-burning natural



Adding power from nuclear sources to our portfolio is part of a strategy to make the utility less dependent on fossil fuels. We are purchasing 206 Megawatts (MW) of power from the Municipal Electric Authority of Georgia (MEAG) from a new nuclear facility at Plant Vogtle, Plant Vogtle Unit 3 came online in July 2023 and Plant Vogtle Unit 4 projected to come online in first quarter of calendar year 2024. We are purchasing power from the Waynesboro, Georgia plant from MEAG under a 20-year agreement.

WATER & SEWER SYSTEMS

JEA's Water System consists of 136 artesian wells that tap into the Floridan aquifer. Water is distributed through 39 water treatment plants and 5,112 miles of water lines.

Our Sewer System comprises a four-county network of 4,402 miles of collection lines and 1,616 pump stations and includes 11 wastewater treatment facilities.

JEA is committed to improving the water quality of the St. Johns River. Our Reclaimed Water System supplies highly-treated water for irrigation. It reduces the amount of nitrogen released to the river because the treatment-enhanced wastewater isn't put back into the river. Using reclaimed water for irrigation also reduces the demand on the potable water supply taken from the Floridan aquifer. JEA uses 584 miles of reclaimed water lines to distribute reclaimed water to some 26,902 reclaimed water customers.

Buckman Treatment Facility



Water System

JEA delivers more than 120 million gallons of water each day to our customers. We regularly test the water we send to customers to ensure its safety, as outlined by federal and state regulatory agencies. Our stateof-the-art technology monitors our water supply grid to bring fresh, clean water to your home. We work hard to help our customers learn how to conserve Northeast Florida's most precious resource, the Floridan aquifer, so that we may continue to benefit from it for generations to come.

Water System Process

The JEA drinking water system consists of wells, water treatment plants, the distribution grid of pipelines, and finally the customers' meters. We have over 130 wells that withdraw water from the Floridan aquifer, about 1,000 feet below land surface. The fresh, clean water is pumped from the well fields to one of 39 water treatment plants, where it then flows through an aerator to remove the sulfur (rotten egg) odor. The water leaves the reservoirs and is disinfected with chlorine per health regulations before it enters over 5,100 miles of water lines for distribution to our customers.



The Florida Aquifer is the source of water in Northeast Florida. JEA utilizes this source to provide potable (drinking) water to our customers. The aquifer is a gigantic undeground river that courses through limestone formations many hundreds of feet underground.
Deep Well Turbine Pumps are used to draw the water from the aquifer and deliver it through 3. Well Headers to the 4. Water Treatment Plant. At the plant, the water is aerated and stored until there is demand for the water. As needed, the water is chlorinated and pumped into the system by the plant's service pumps. 5. Transmission Mains carry the potable water through 0.
Distribution Mains, service connections, and water meters to our 7. customers.

Wastewater



JEA's sewer collection system handles more than 80 million gallons of wastewater every day. Our waste collection and treatment system consists of more than 4,400 miles of collection lines, over 1,600 pumping stations and eleven wastewater treatment plants. Removing wastewater from your home, your business and our community is serious business. It's a crucial service we've provided our customers since 1997, when we assumed responsibility for the city's water and sewer service.

Our Wastewater Facilities

- Buckman Wastewater Treatment Facility: Our largest regional sewer plant with advanced nutrient removal.
- District II Wastewater Treatment Facility: A regional sewer plant that treats wastewater for reclaimed water. The reclaimed water from this plant is used at JEA's Northside Generating Station and is also available to commercial reuse customers.
- Southwest Wastewater Treatment Facility: A regional sewer plant that provides advanced nutrient removal.
- Arlington East Wastewater Treatment Facility and Mandarin Wastewater Treatment Facility: Regional sewer plants that reclaim treated wastewater for irrigation usage by commercial and residential customers in both Duval and St. Johns Counties. Several golf courses utilize reclaimed water produced at these facilities. Both facilities have also been upgraded to provide advanced nutrient removal.
- Our smaller sewer plants include:
- Julington Creek Wastewater **Treatment Facility**
- Blacks Ford Wastewater **Treatment Facility**
- Nassau Wastewater Treatment **Facility**
- Ponte Vedra Wastewater **Treatment Facility**
- Ponce de Leon Wastewater **Treatment Facility**
- Monterey Wastewater Treatment **Facility**

Blacks Ford Wastewater Treatment Facility



Reclaimed Water

JEA has currently has over 26,900 reclaim customers as of September 2023. Customers who use reclaimed water for their irrigation help conserve water drawn from the pristine Floridan aquifer, the source of our local drinking water.

JEA has taken reasonable and thoughtful steps in the development of its reclaimed water program.

JEA participated in the development of the City of Jacksonville's Reclaimed Water Ordinance (2006) and

the River Accord (2007). JEA's reclaimed water program consists of treating and delivering reclaimed water to meet customer water demands ranging from irrigation to industrial uses. This is beneficial since a portion of the reclaimed water offsets the need to withdraw potable-guality water from the Floridan aquifer (to irrigate golf courses, for example), a portion offsets JEA's potable water demand (residential irrigation) and a portion recharges the aquifer (surficial aquifer irrigation). This reclaimed water use also improves water quality by reducing nutrient loading to the St. Johns River.

- JEA's reclaimed water system current consists of more than 300 miles of transmission.
- Ten reclaimed water facilities and two storage/re-pump facilities provide a total reclaimed water per day.
- River to serve the water demands of the highest growth within the service area.
- Reclaimed water customers include golf courses, power plants, wastewater treatment plants customers.
- retrofitting existing neighborhoods.

JEA plans to continue to expand its reclaimed water system to meet the reclaimed water needs of its water service area in an economically, technically and environmentally feasible manner.





capacity of over 30 million gallons per day with a current average daily flow rate of 19 million gallons

• The majority of JEA's reclaimed water transmission and distribution system is built east of the St. Johns

commercial park/development common ground irrigation, surficial aquifer recharge, and residential

JEA's reclaimed water strategy has been to target new growth, which is much more cost effective than

SERVICE AREAS

SERVICE AREAS

Electric

The Electric System serves approximately 900 square miles, which includes virtually the entire City (Duval County), with the exception of Jacksonville Beach and Neptune Beach. The Electric System also provides retail service in portions of the northern sections of St. Johns and Clay Counties, which are located southeast and southwest of the City, respectively.



Jacksonville's Water Grid

JEA's Major Grid provides water to most of Duval County and the northwest portion of St. Johns County. JEA also supplies water to the Yulee area, Mayport, and from Ponte Vedra south to Vilano Beach along A1A. Also along the Intracoastal Waterway in Palm Valley there is one small area that gets its water through an interconnection with the St. Johns County Utility Department. Our grid arrangements provide reliable water service backup as needed, particularly during emergencies or periods of routine plant maintenance shutdowns.



DISTRICT ENERGY SYSTEM

JEA's District Energy System (DES) was formally established as a separate utility system (effective October 1, 2004) to include both local chilled water facilities and activities, as well as any local district heating facilities JEA may develop in the future. **DES** is an ancillary service and there is currently no requirement of any JEA customer to connect. DES customers are served through a long-term service agreement with the JEA.

The DES consists of 3 chilled water plants with a combined 19,900 tons total chilled water capacity. Currently JEA has 15,930 tons of cooling demand under contract and in full service with an additional 3,530 tons cooling demand under contract and in construction. JEA's first chilled water facility became fully operational in March 2003. Utility scale chilled water can cost effectively deliver a variety of benefits to customers including superior comfort, convenience, flexibility, and reliability when compared to traditional packaged cooling equipment.

In 2023, JEA began work on updating their DES master plan. This work is ongoing but will seek to leverage key advantages chilled water technology offers relative to power demand and annual energy. Current belief is that JEA's DES can positively impact JEA electric system and city resiliency goals while still cost effectively delivering a variety of benefits to JEA customers. JEA will also look to identify opportunities in which to expand its infrastructure to serve additional chilled water customers. To do all of this, JEA's DES is going to have to look different than it has in the past.

Mechanics of the System





JEA's second chilled water facility is the Downtown Plant located on Duval Street in downtown Jacksonville. The Downtown plant current serves 6 city locations and 2 JEA buildings within the Downtown District with an additional customer currently under contract and in construction.





SERVICE AREAS

JEA's first chilled water facility was the Hogan's Creek plant located on East Church Street in downtown Jacksonville. The Hogan's Creek plant currently serves 3 customers within the Hogan Creek's District with an additional customer currently under contract and in construction.

Downtown District



JEA's third chilled water facility is the Springfield Plant located in the Springfield neighborhood of Jacksonville. The Springfield Plant currently serves the UF Health Jacksonville complex.



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