

## Executive Summary

There are numerous considerations when evaluating a possible transaction, such as a sale of JEA. Value – the price a willing buyer would pay should the City be willing to sell – is but one consideration. In addition, there is the historical relationship between the City of Jacksonville, the municipal utility and the utility's customers. There are the multiple ways in which the utility impacts the City's welfare. There are the advantages (and disadvantages) that accrue to the City as owner of a municipal utility, vs. the advantages (and disadvantages) of being served by an investor-owned utility. These, along with numerous other details, are factors to be evaluated when considering the possible sale of the JEA.

The City of Jacksonville (COJ) entered the utility business in 1880, when it began operating a water and sewer system. Then, in 1895, it added the electric system, which remained a department of city government until the independent Jacksonville Electric Authority was created in 1968. Article 21 of the Jacksonville City Charter gave JEA the authorization to own, manage and operate a utilities system. In 1997, Jacksonville's water and sewer operations merged into JEA.

Today, JEA is the largest municipal electric utility in Florida and the 4<sup>th</sup> largest utility in the state, serving approximately 459,000 electric customers, 341,000 water customers and 264,000 sewer customers over its 900 square mile service territory.<sup>1</sup>

All utilities in Florida are charged with providing safe, reliable service at just and reasonable rates. However, there are different approaches to fulfilling that responsibility. One of the most significant differences is in their ownership structure, or the basic question of who owns the utilities assets.

There are three basic ownership models in Florida. One model, investor-owned utilities, requires the existence of private investors that voluntarily finance the utility's infrastructure. The second model, the municipal utility, is wholly owned by an individual city, sometimes as a department of the city, other times as a separate corporate entity. The third model, the cooperative, is wholly owned by all of the customers it serves. The ownership model is a critical factor in determining how a utility will provide service, as it determines the roles and responsibilities for utility finance, operations, and regulation, and how the benefits and risks accrue to utility stakeholders.

Regardless of the ownership model, however, the costs of providing service, with only a few exceptions, are covered by the customer.

## Utility Value

The value of a utility to its owners or to potential owners can be viewed in two ways: The financial commitments and assets of the current owners to provide utility services, and the value of the services provided by the utility as a going concern. The former approach treats the utility's resources as severable from the business itself, such as might be the case if the owners sold the assets, but retained the business. This might be like a hotel selling its building and property to a third party, and then leasing them back to continue operating the hotel business. The latter approach, going concern, is more holistic in that it treats the utility as both a holder of financial resources and a generator of valuable services. We examine both approaches.

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<sup>1</sup> JEA 2017 Annual Report.

Regarding the first approach, the utility's accounting records show the owners' financial commitments. A significant component of this value are the dollars invested in the utility's long-term physical assets, namely the machinery that generates and delivers electricity, processes and delivers water and treats wastewater.

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*The value of a utility can be seen as the value of its assets as well as the ability of those assets to produce value to its customers*

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### Electric Utility Value

According to JEA's 2017 Annual Report, the net book value<sup>2</sup> of the assets to provide electricity service was \$3.055 billion. There are other assets as well, including construction, fuel and materials stocks, and accounts receivable. When these other factors are included, the value of the assets necessary to provide service is approximately \$3.495 billion.

This does not mean that JEA's electricity assets could be sold for \$3.495 billion. Prices received for asset sales would likely reflect considerations such as inflation – since the book values are historical rather than inflated -- and costs of putting the assets to other uses, since only the assets, and not the business, would be sold in the first approach. As a result the prices received might be higher or lower than those reflected in the \$3.495 billion.

The going concern value of the utility is the ability of that asset base to produce goods and services, and ultimately, value for its owner. Each year JEA transfers a portion of its revenue to the COJ. This amount has remained relatively stable in recent years, averaging approximately \$93.5 million. Considering that investor-owned utilities in the US are allowed a 9.68% rate of profit,<sup>3</sup> the present value of this return that the COJ receives is approximately \$964 million. This makes the value of JEA's electricity business approximately \$4.5 billion, which is the sum of the assets value and the present value of future net revenues.

### Water Utility Value

Because the utility regulator in Florida – the Florida Public Service Commission or FPSC – values assets of water and wastewater service providers differently than it does assets of electric utilities, we calculate two different values for JEA's water and wastewater assets: the net capital assets reflected in JEA's fiscal year 2017 financials, and the net book regulatory accounting value, which is the approximate value that the FPSC would use if it were regulating JEA's water and wastewater services.<sup>4</sup> Using these two methods, the value of JEA's water and sewer assets ranges from \$1.448 billion to \$2.616 billion and the money from an asset sale could range from \$0.3 billion to \$1.5 billion.

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<sup>2</sup> Net book value is the original cost of the assets, less any allowances for depreciation.

<sup>3</sup> More specifically, this is the average allowed return on equity for electric utilities, according to the 2017 Rate Case Survey published by Public Utilities Fortnightly. Return on equity is the amount of profit that the utility is allowed divided by the utility shareholders' equity.

<sup>4</sup> As we explain in the body of the report, we had to make numerous assumptions to arrive at a net book regulatory account value.

JEA Water and Sewer business transferred approximately \$23.5 million to the COJ in FY17. Historically, from 2011 to 2017, the transfer has grown about 3% per year. Assuming that future transfers grow at that rate in nominal terms, and discounting future transfers at a 5% discount rate to allow for inflation and the time value of money, the net present value (NPV) of the Water and Sewer transfers to the COJ is approximately \$400 million.

The COJ would no longer receive annual transfers from the JEA Water and Sewer business, but would receive property taxes if assets were sold to a taxable entity. Considering the loss of transfer and the gain of property taxes, the net financial gain to the city would have a net present value of \$0.2 to \$1.4 billion.<sup>5</sup>

### Total Value

Incorporating the asset value and going concern value for the electric utility, the two different asset valuation methods for JEA's water utility assets combined with the going concern value of the water utility and the asset value of the district energy utility gives a value of \$6.3 billion to \$7.5 billion for JEA's consolidated operations.

### Value to Community

Changing the ownership of any business unit of JEA would change how business and policy objectives are met. Currently JEA's Board holds JEA responsible for pursuing multiple objectives, including providing quality services, maintaining financial health, and meeting community objectives for economic growth and environmental protection. If the businesses were privately held, the owner would likely focus on shareholder return, subject to the regulations of the FPSC regarding service quality and other obligations, and subject to state and federal environmental regulators. In many instances private owners see economic and community development as being consistent with their desire for profitability, but that isn't always the case. Also in some instances the FPSC allows utilities to reflect community economic development goals in the prices the utilities charge customers.<sup>6</sup>

### Value to Customers - Quality of Service and Benchmarking

In addition to being valuable to owners, utilities are valuable to their customers. This value is determined in part by the quality of service that a utility provides. But since increasing quality of service often comes with increased costs -- which are generally ultimately born by customers -- utilities, regulators, and policy makers should be vigilant to ensure that the costs customers are asked to cover are worth the value they create. Therefore, it is useful to assess utility performance in terms of quality and costs.

Benchmarking is a widely-used tool for assessing this performance. The findings of benchmarking studies are not definitive because of data limitations and because researchers have yet to find analytical techniques that perfectly address performance issues. Indeed there are several techniques and they may offer conflicting answers. So while benchmarking studies, such as provided in this report, may provide useful insights into utility performance, readers should be aware of their limitations and refrain from considering the results as determinative.<sup>7</sup>

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<sup>5</sup> This should not be confused with a financial benefit from selling JEA's Water and Sewage business because other factors, such as the costs of making the transaction and the financial impacts on citizens of Jacksonville, would likely also be considerations.

<sup>6</sup> FPSC Rule 25-6.0426

<sup>7</sup> This report's benchmarking analysis utilizes a relatively new data set, the US Department of Energy's compilation of data on outage frequency and duration spanning electric utilities across the country. While this data has

This report’s benchmarking studies the duration and frequency of utility outages in conjunction with two popular benchmarking techniques, one statistical and one numerical, to determine JEA’s performance in this aspect of service quality.

Overall, the benchmarking results show that JEA’s Electric business performs well in comparison to other electric utilities in Florida. JEA’s large number of customers and lower customer density make controlling outages more challenging overall, but performance is still better than average utilities. However, the analysis also offers insight into strategies that JEA might be able to employ to further improve performance.

JEA’s Water and Sewer business compares favorably to municipal water and wastewater utilities elsewhere in the US. JEA’s business has consistently high credit ratings from multiple agencies, indicating strong financials. JEA’s operating and maintenance expenses per 1,000 gallons processed are at or below the median for comparable municipal utilities.

### Risk and Uncertainties

#### Plant Vogtle

JEA has decided to expand its capacity for generating electricity by contracting with a new nuclear plant in Georgia called Plant Vogtle. The value of JEA’s obligation is significant, at \$1.6 billion.<sup>8</sup>

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*JEA faces significant obligation and uncertainty as a consequence of the manner in which the Vogtle contract has changed over time.*

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JEA’s contractual role in construction of new Plant Vogtle’s nuclear units has been rife with uncertainty recently, as has the project itself. JEA entered into a Power Purchase Agreement (PPA) dated May 12, 2008, with the Municipal Electric Authority of Georgia (MEAG) as seller for the sale and purchase of approximately 41.175% (206 megawatts) of MEAG’s share of the electric capacity and energy projected to be generated during the initial 20 years of the operation of Vogtle Units 3 and 4. This is referred to as Project J. This agreement relates to a nuclear power project undertaken by four power providers in Georgia: MEAG, the Georgia Power Company, Oglethorpe Power Corp., and the City of Dalton, Georgia. For a number of years, JEA has touted this as a way to add carbon-free, cleaner electricity.

Recently uncertainty has arisen in the project. It may have started when Westinghouse and WECTEC each filed bankruptcy on March 29, 2017. Those entities were to design, engineer, construct and test the Units 3 and 4. There had been significant cost overruns. However, the contract with the new contractor, Bechtel, shifted the responsibility of cost overruns to the project owners. COJ and JEA have sued MEAG in

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historically been compiled by some individual states, a common dataset is a recent development. It is important to note that this data set measures three years of performance in two specific metrics. And while those metrics are seen as valuable to customers, they do not incorporate the entire spectrum of service quality, nor do they speak to the utility’s performance in those metrics in the years before or the years ahead. However, this study leverages this dataset to offer insight into some of the factors that influence outages in electricity service and their duration, additional opportunities to influence service outages, and may even offer insight into the performance of utilities in these aspects of service.

<sup>8</sup> City of Jacksonville v. Municipal Electric Authority of Georgia (4<sup>th</sup> Judicial Circuit, Fla. 9/11/18) Paragraph 51

the Circuit Court in Duval County, Florida, on September 11, 2018, asking for declaratory relief because “JEA acted without authority and in violation of the constitution, laws, and public policy of the state of Florida in entering into the PPA.” Also on September 11, MEAG sued JEA in the U.S. District Court for the Northern District of Georgia. MEAG seeks a declaratory judgment that the PPA is valid and enforceable against JEA. It wants the court to issue a specific performance order requiring JEA to cooperate with MEAG in carrying out the contract. JEA has also sought a ruling by the Federal Energy Regulatory Commission (FERC).

The uncertainties around this project, its potential costs, benefits and the accompanying litigation will have a significant impact the value of the JEA to both the City of Jacksonville and any potential JEA purchaser.

### Regulatory Considerations

The value of a municipal utility is also affected by how it interacts with the political and legal landscape at the state and federal levels. Laws and rules at both levels may affect municipal utilities differently from investor-owned or cooperative utilities. A comprehensive understanding of these differences can highlight the manner in which a municipal utility’s value is impacted.

In general, the FPSC<sup>9</sup> requirements are more numerous and rigorous for investor-owned utilities. Therefore it is likely that an entity acquiring JEA would factor Florida’s statutes and the FPSC’s rules and orders into its view of JEA’s value, including regulatory assessment fees that investor-owned utilities pay, but that municipal utilities do not.

From a regulatory perspective, investor-owned electric utilities are subject to numerous more regulatory requirements than are municipal-owned utilities in Florida. The FPSC has relatively narrow jurisdiction over municipal utilities compared to its broader oversight of investor-owned utilities. Municipal electric utilities are generally subject to FPSC oversight on consumer protection, safety, reliability, rate structure (but not rates), and territorial agreements. The FPSC’s jurisdiction over private water and wastewater companies focuses primarily on rates and service. There is an exemption in the statute for systems owned, operated, managed, or controlled by governmental authorities.

### Case Studies in Utility Ownership Transitions

The sale of municipal utilities are not numerous in Florida. In the electric arena, there have been two high-profile sales to investor-owned utilities. The most recent involves the Florida Power & Light (FPL) acquisition of the Vero Beach electric utility in 2018. There was also a 1992 acquisition of Sebring Utilities Commission by Florida Power Corp.

Two recent FPSC orders address the issue of a private utility’s acquisition of a municipal electric utility. On July 2, 2018, the FPSC issued an order addressing accounting aspects of the FPL acquisition of the Vero Beach electric utility. The transaction includes a positive acquisition adjustment. That order has been challenged but the FPSC reaffirmed their decision on November 27, 2018. In 1992, the FPSC approved certain transactions in Florida Power Corp.’s acquisition of Sebring Utilities Commission.

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<sup>9</sup> The FPSC is to ensure that Florida's consumers receive essential services — electric, natural gas, telephone, water, and wastewater — in a safe, reasonable, and reliable manner by exercising its regulatory authority over rates, competitive market oversight, or monitoring of safety, reliability, and service. (Source: Florida Public Service Commission Mission Statement and Goals)

In each case, the FPSC emphasized that its decisions were determined on a case-by-case basis. Also, the FPSC stated that it does not have jurisdiction over the actual approval of the transfer. So, while the proceedings can provide valuable insight into the process of privatization in Florida, their financial or procedural impact on future proceedings is not known.

### Other Considerations

Other factors that may cause uncertainty or risk include:

- Fundamental changes to the utility industry from disruptive technologies that may result in stranded costs if the economic value of JEA's current assets is impacted by these changes
- JEA, as a municipal utility, benefits from access to federal and state disaster recovery funds that may not be available to an investor-owned utility. Additionally, JEA employs certain stabilization strategies to reduce volatility – strategies that may not be available to investor-owned utilities.
- JEA's operations have multiple agreements and contracts with an array of government and private entities that have evolved as the utility has expanded service to meet the needs of a growing community. These agreements could bring enormous complexity to the task of selling one of more business units
- Fundamental change in rate determination
- The potential for community expectation that any buyer would retain and use local employees
- The potential for community concerns about combining JEA's administrative, general, operations and capital investments with any buyer's existing organizational structure since the combined organization may not be local
- Potential loss of opportunities to control utility investments
- Decreased influence of capital and operating expenditures to support economic development or other community goals
- Potential loss of synergies with the district energy or the water/wastewater system
- Potential for more narrow focus on regulatory compliance
- Utilization of any sale proceeds

## I. Reconciliation of the Report to the Original Study Scope

The original scope of the study was a compilation of concerns advanced by the Jessie Ball duPont Fund and did not necessarily follow the sequence of logical steps necessary for a coherent analysis. As an aid to readers who may only be interested in certain topics contained in the original scope, below is a mapping of the scope to the analysis. The scope topics are in bold and the normal text maps the topics to the report.

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

Most of the information assessing the value of JEA is covered in Section IV of this report, but Sections VI and VII contain applicable information for municipal utilities in general that also applies to JEA.

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

This topic is covered in Section V of the report, focused primarily on benchmarking JEA against other utilities. Complete detail on the statistical analysis and benchmarking of all of the utilities in the sample is covered in the Technical Appendix.

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

This topic is addressed in Sections II and V of this report.

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

This topic is addressed in Section VI of this report.

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

This topic is addressed in Section IV and VI of this report.

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

This topic is covered in Sections IV, VI, and VII.

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

This analysis is included in Topic 1, the valuation analysis.

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

This analysis is included in Topic 1, the valuation analysis.

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

The financial implications of this topic are addressed in Section II, while the legal implications are covered in Section VI.

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

The financial implications of this topic are addressed in Section II, while the regulatory implications are covered in Section VI.

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

This is covered in Section VII.

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

This is covered in Section VII.