From: Crawford, Juli E. - Manager - Financial Planning & Rates <crawje@jea.com>
Sent: Thursday, January 18, 2018 5:12 PM
To: 'Michael Mace' (MACEM@pfm.com)
Subject: Draft
Attachments: Draft 011618.docx

Mike, attached is the latest draft. We plan to continue to edit tomorrow.

Thanks,
Juli

Introduction - P

JEA Asset Summary - J

JEA Thoughts – more to come from PFM

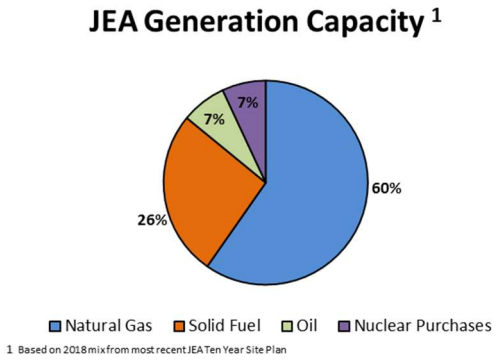
JEA is located in Jacksonville, Florida, and proudly serves approximately 460,000 electric, 340,000 water and 264,000 sewer customers in Northeast Florida. JEA is an independent agency of the City of Jacksonville. JEA businesses are divided into three main systems: electric, water/sewer, district energy. It is a not-for-profit, community-owned utility created by the City of Jacksonville to serve those who live here and in the surrounding communities. JEA provides best-in-class utility services to our business and residential customers at an affordable cost, while ensuring our precious natural resources are protected.

JEA's electric system has been in operation since 1895 with a tradition of outstanding reliability and superior performance. JEA is one of only 184 of the nation's more than 2,000 public power utilities to earn the Reliable Public Power Provider (RP3®) designation from the American Public Power Association for providing consumers with the highest degree of reliable and safe electric service.

JEA provides a superior customer experience, working collaboratively with our business customers to develop utility solutions that meet their business needs. JEA is ranked in the top quartile in business customer satisfaction in the J.D. Power survey, and ranks #1 in business customer satisfaction in the state of Florida. JEA takes pride in providing excellent customer service, offering a dedicated business customer experience center and an Account Executive team that provides personalized, one-on-one, dedicated service to meet the needs of our highly-valued business customers.

Need statement on customer base for revenue and potential for growth.

Features of Electric System Assets:



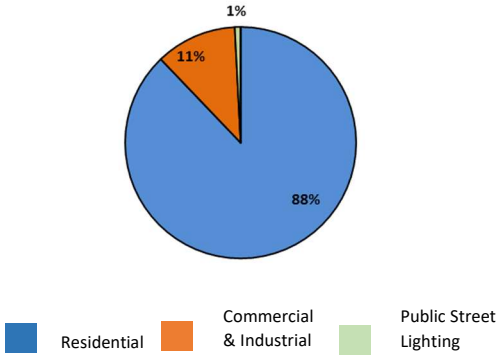
The JEA Electric System consists of generating facilities located on four plant sites within the City of Jacksonville. In January 2018, JEA shutdown the St Johns River Power Park (SJRPP) a plant co-owned with Florida Power and Light. JEA owns a 23.6% ownership interest in Scherer Unit 4, a coal fired generating unit located in central Georgia. JEA also purchases power from a landfill facility and has been authorized to purchase upwards of 300MW of additional solar output from field sites in and around the City of Jacksonville. JEA entered into a 20-year purchase power agreement to receive 206MW of nuclear capacity and energy from Plant Vogtle Units 3 & 4, which is under construction in Southern Georgia.

JEA owns and maintains 745 circuit miles of transmission and 6,800 miles of distribution lines. The T&D system consists of over 70 substations and 200 high voltage transformers, 340 distribution feeder circuit

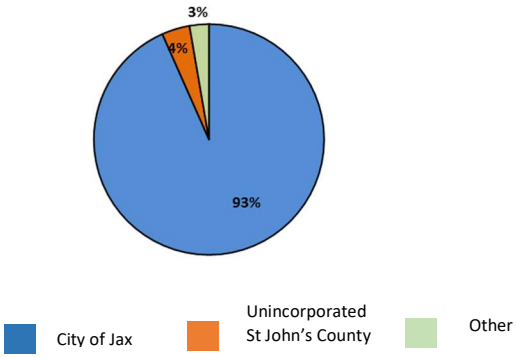
lines, over 100,000 lower voltage transformers and over 200,000 electric poles. The T&D system is approximately 44% overhead and 56% underground.

JEA serves electricity to 459,000 customers covering 900 square miles within three counties (Duval, Clay, St Johns) and six municipal tax jurisdictions (Cities of Jacksonville, Baldwin, Atlantic Beach, Orange Park, Unincorporated Clay County, Unincorporated St Johns County).

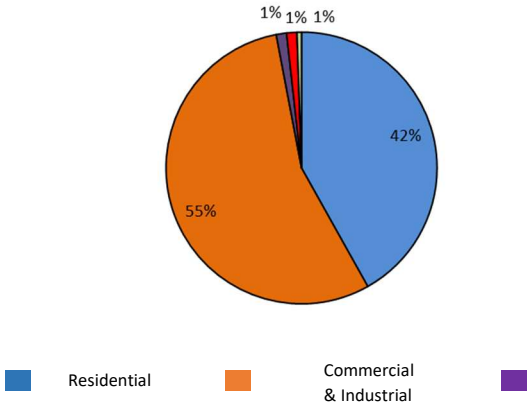
JEA Number of Electric Accounts



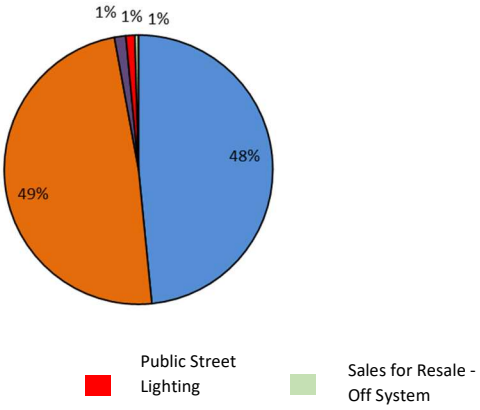
JEA Electric Accounts by Area

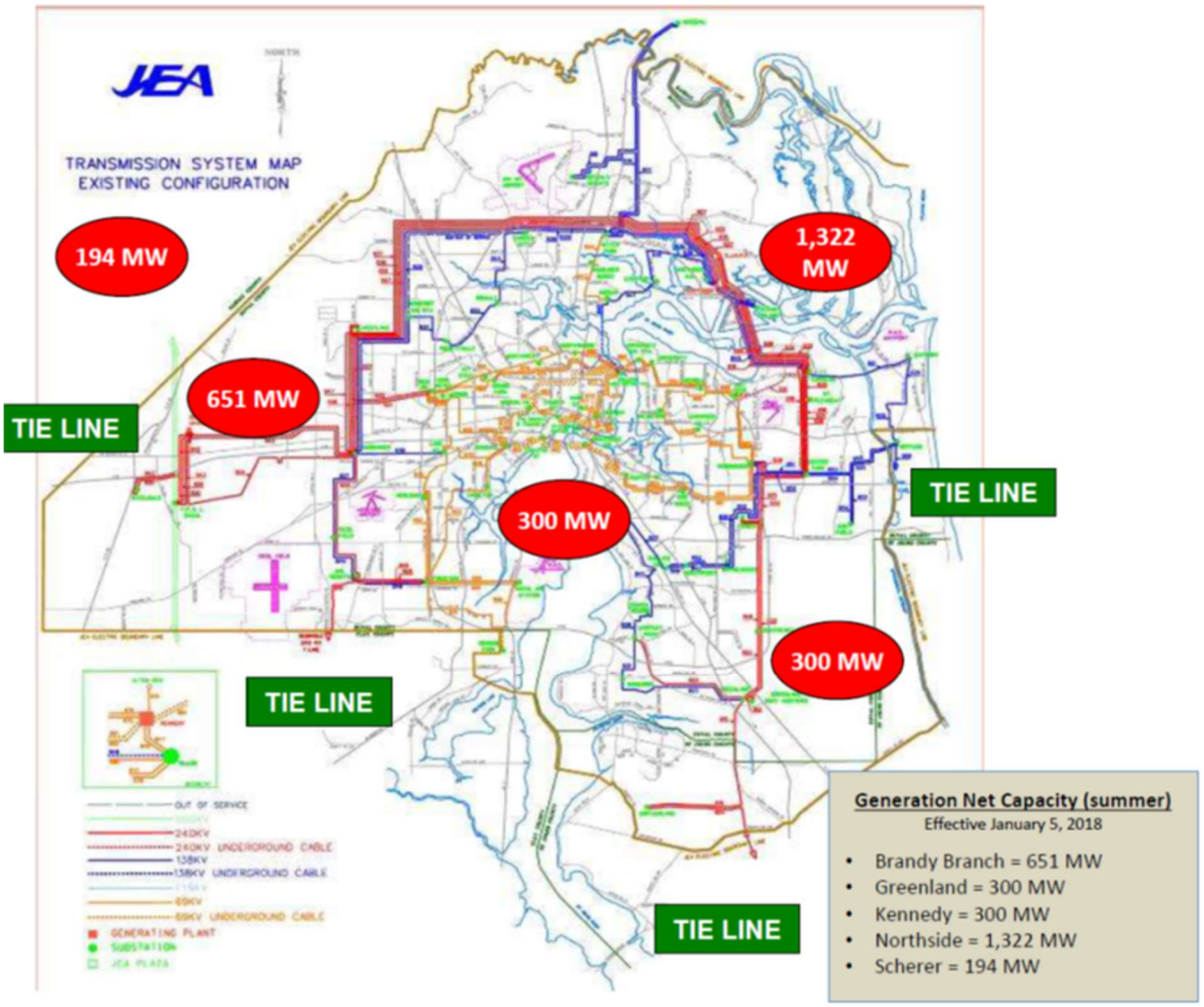


JEA Electric System Sales (MWh)



JEA Electric System Revenue



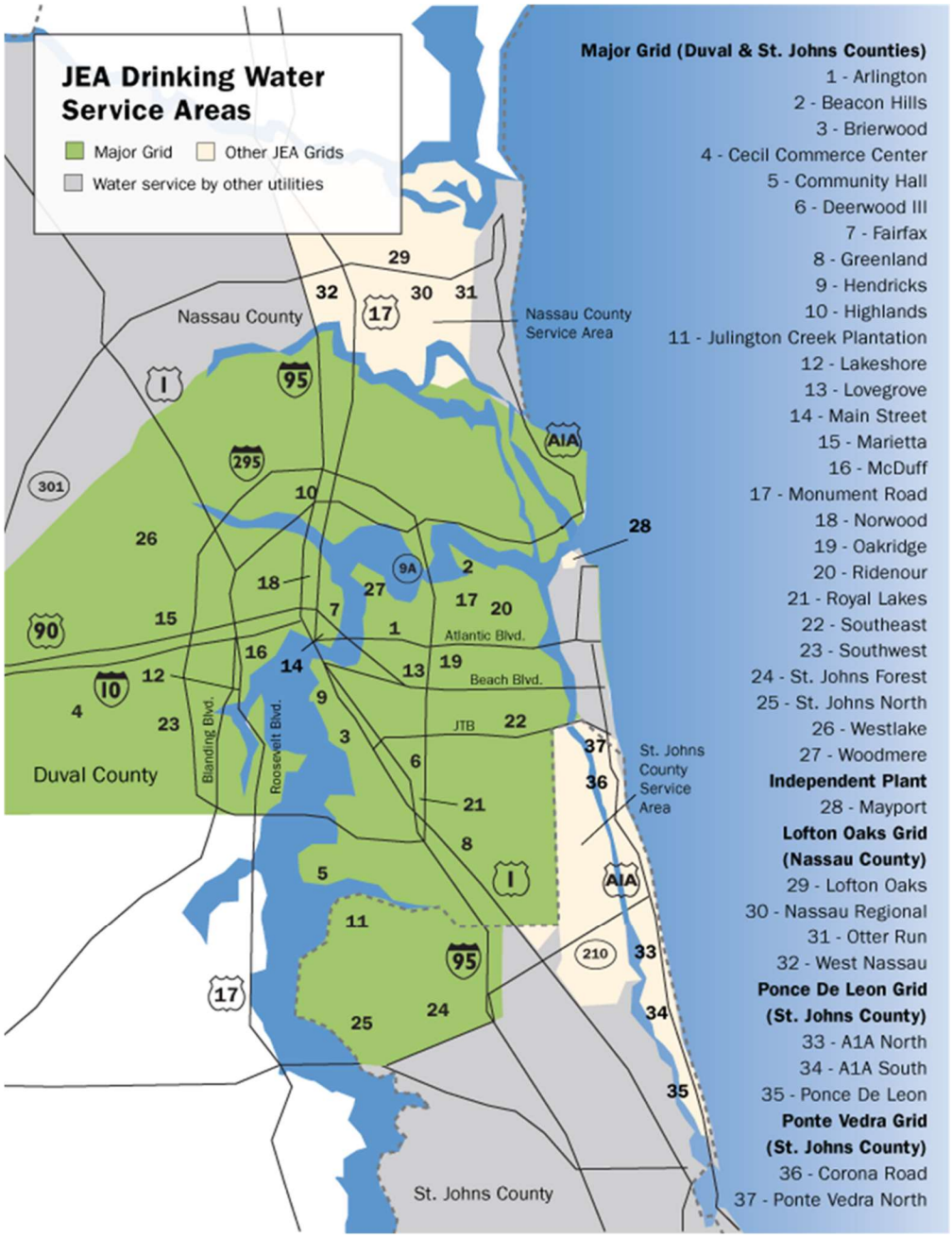


Features of Water/Sewer System Assets:

The JEA Water and Sewer System consists of 137 permitted wells, 37 water treatment plants with over 300MGD of system water capacity and 4,700 miles of water pipes. The Sewer system consists of 11 treatment facilities with a 241MGD peak capacity, 1300 pump stations and 4,000 miles of pipe. JEA also owns over 300 miles of pipe delivering reclaimed water from ten reclaimed water facilities.

JEA supplies water to 341,000 customers and treats wastewater from to 264,000 customers covering four counties (Duval, Clay, St Johns, Nassau). JEA also supplies reclaimed water to 9,000 customers.

Charts?



Features of District Energy System Assets:

The District Energy System provides chilled water to customers for air-conditioning. JEA owns four chilled water plants and facilities, which generate and distribute chilled water to buildings located within the respective districts served by the plants and certain ancillary equipment. The biggest customers of the district energy system are city owned facilities such as the baseball park, the arena, the Duval County Courthouse, the library and other government buildings. JEA also has contracts with private entities to serve institutional buildings such as UF Health Jacksonville.

Overview of Municipal vs. IOU Ownership - B

JEA Thoughts – more to come from PFM

The biggest difference between municipal and investor-owned utilities boils down to the philosophical running of the utility. Municipal utilities answer solely to customers. Business drivers are centered around providing reliable and affordable service to the community in order to enhance the growth, development, and quality of life in the community. Investor-owned utilities are primarily incentivized to maximize returns for shareholders. While both offer a similar commodity, the drivers behind providing that service are fundamentally different, likely resulting in different relationships with City government and the local community.

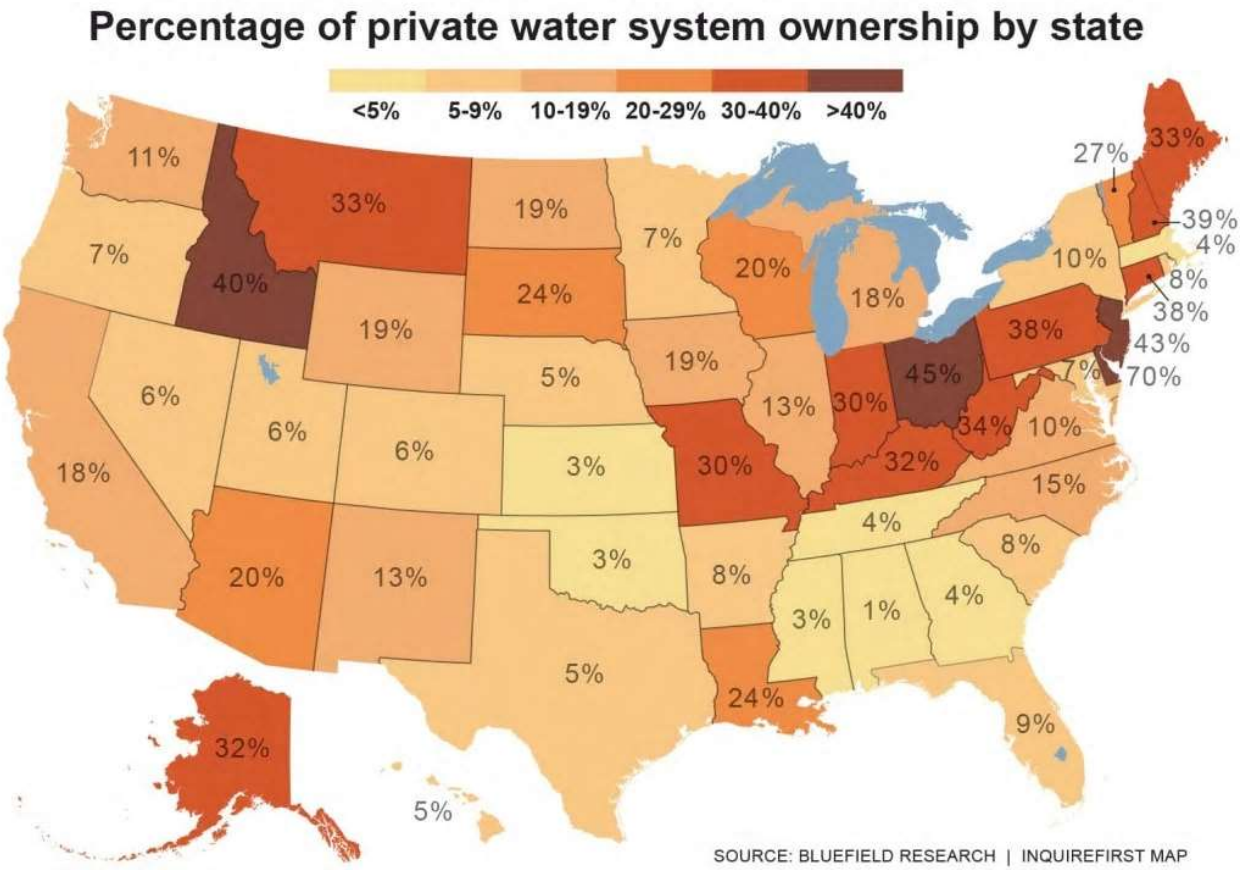
Electric Utilities	Municipal	Investor Owned
Ownership	Local government body and customers of the utility, usually limited to the service area	Shareholders or investors, not limited to the service area
Structure/Management	Not-for-profit public entity managed locally by elected or appointed board members and public employees	Private company. Shareholder elected board appoints management team of private sector employees.
Rate Setting & Regulation	Customer rates are set by utility's governing body/board or city council in a public forum. Florida Public Service Commission (FPSC) regulates rate structure. Little or no regulation of wholesale rates. Costs for all plant investment is immediately recoverable in rates.	Customer rates are set and regulated by FPSC through a public process that includes some customer participation. Some regulation of wholesale rates. Customers also represented by Florida Office of Public Counsel. Except for nuclear, plant costs cannot be recovered in rate base until plant is used and useful.
Mission/Goals	Optimize benefits for local customer owners and local communities	Optimize return on investment for shareholders
Financing	Tax-free bond sales, bank borrowing	Stockholders, bond sales and bank borrowing
Power Generation/Transmission	Own and operate generation facilities or purchase power through contracts. FPSC must certify need for facility investment. Can be jointly owned with IOUs and co-ops	Own and operate generation facilities or purchase power through contracts. Can be jointly owned with munis and co-ops
Profit/Net Revenue	Rates are set to recover costs and earn additional return to maintain bond ratings and invest in new facilities. Can	Utility rates are set to recover costs and earn a reasonable return as profits for investors in

	provide return to local government owner	return for the risk they bear for investing in new facilities
Size/heterogeneity	Munis differ greatly in size and number of customers served. Local or regional geography and customer mix.	Large in size and number of customers, complex geographic and customer mix.

Water/Wastewater Utilities [1]	**Municipal (Muni)**	**Investor Owned (IOU)**
Ownership	Local government body and customers of the utility, usually limited to the service area	Shareholders or investors, not limited to the service area
Structure/Management	Not-for-profit public entity managed locally by elected or appointed board members and public employees	Private company. Shareholder elected board appoints management team of private sector employees.
Rate Setting & Regulation	Customer rates are set by utility's governing body/board or city council in a public forum.	IOUs may be regulated by a county or by the Florida Public Service Commission (FPSC) for rates and service. It is the option of a county to regulate IOUs serving that single county or allow the FPSC to regulate. IOUs that cross county jurisdiction are regulated by the FPSC. Add used and useful?
Mission/Goals	Optimize benefits for local customer owners and local communities	Optimize return on investment for shareholders
Financing	Tax-free bond sales, bank borrowing	Stockholders, bond sales and bank borrowing
Plant and Transmission	Own and operate plant facilities. Can be jointly owned.	Own and operate plant facilities. Can be jointly owned with munis and co-ops.
Profit/Net Revenue	Rates are set to recover costs and earn additional return to maintain bond ratings and invest in new facilities. Can provide return to local government owner	Utility rates are set to recover costs and earn a reasonable return as profits for investors in return for the risk they bear for investing in new facilities
Size/heterogeneity	Munis differ greatly in size and number of customers served. Local or regional geography and customer mix.	May differ greatly in size and number of customers, often serve individual development

		or small geographic and customer mix.

[1] Format Taken from California Energy Commission



Map Source: The Washington Post, "Towns sell their public water systems – and come to regret it", July 2017

Overview of JEA's Businesses and Cash Flows - J

JEA Thoughts – more to come from PFM

JEA's operation is composed of three enterprise funds – the Electric Enterprise Fund, the Water and Sewer Fund, and the District Energy System (DES). The Electric Enterprise Fund is comprised of the JEA Electric System, Bulk Power Supply System (Scherer), and St. Johns River Power Park System (SJRPP). JEA maintains separate accounting records for the Electric System, the Bulk Power Supply System and its ownership interest in SJRPP. For purposes of financial reporting, however, JEA prepares combined financial statements that include the Electric System, the Bulk Power Supply System, JEA's interest in the Power Park, the Water and Sewer System and the District Energy System. The financial statements

consist of the related statements of net position, statements of revenues, expenses, and changes in net position, and statements of cash flows covering the fiscal year period October 1 – September 30.

Common methods and financial metrics used in the private sector to assess valuation ranges explore free cash flows, discounted future cash flows of earnings, and multiples of EBITDA (earnings before interest, taxes, depreciation, and amortization). Equivalent measures of these financial metrics found on JEA's statement of revenues, expenses, and changes in net position are listed below.

As of 9/30/17 ($'000)	Operating Revenues	Operating Expenses*	EBITDA**	City Contribution	Equivalent Earnings
Electric System [1]	$1,299,592	($982,521)	$516,814	($92,271)	$424,543
Water/Sewer	$457,908	($305,131)	$294,615	($23,552)	$271,063
DES	$8,692	($6,934)	$4,122	$0	$4,122

1 Excludes SJRPP – shutdown January 2018

Includes Depreciation
***Excludes Depreciation, Interest Expense, and other non-operating income/expenses*

JEA's statement of net position, more commonly referred to as a balance sheet, also contains relevant financial metrics. Cash and cash equivalents on hand (less current liabilities) can be used to satisfy portions of long-term debt obligations and both the assets and liabilities are factored into the net transaction price. Net capital assets are another indicator of value although these are historical amounts and might not represent current replacement values for JEA's invested infrastructure assets.

As of 9/30/17 ($'000)	Cash and Equivalents	Current Liabilities	Long-Term Debt	Net Capital Assets
Electric System [1]	$802,772	($145,154)	($2,328,211)	$2,687,232
Water/Sewer	$447,743	($35,426)	($1,625,187)	$2,615,950
DES	$7,035	($89)	($36,446)	$36,180

1 Excludes SJRPP – shutdown January 2018

JEA's financial indicators are provided to illustrate some of the measures that are important to the valuations and prices paid by potential buyers. Recent transactions allow for comparable benchmarks to be made and applied onto JEA's financial metrics. These results are for estimating and illustrative purposes. Ultimate price will be determined as a result of a competitive process and following and in-depth due diligence effort by potential buyers.

Introduction to Utility Enterprise Valuation - P

Traditional Valuation Methodologies - P

Utility enterprise value is a function of two key drivers: the market valuation of equity investments in the sector and the ability of an acquirer to earn a rate of return on equity in the rate base of the utility both today and in the future. It is established by the market, commonly through a competitive sale process.

For comparison, there are two values that are useful to bear in mind when comparing to any acquisition price for the enterprise. The first is net assets, which is the total value of capital invested in the utility less the accumulated depreciation for the utility. The second is the value of the discounted cash flows from JEA to the City of Jacksonville over and above what the City would receive from a tax paying private utility. As referenced in section xxxxx, a private utility would have contributed approximately $52 million less in FY17 than JEA's payment to the City General Fund This analysis forecasts the incremental transfers to the City of Jacksonville and discounts them to today.

($ thousands)	Net asset value	Discounted cash flows (Assumes 4% discount rate and 2% differential growth over 50 years)
Electric	$2,687,232	
Water & Sewer	$2,615,950	
District Energy System	$36,180	
Total	$5,339,362	$1,634,028

While both methodologies are appropriate for measuring the "value" of the utility, neither captures the market value as established through a competitive process and these values should therefore be used only to provide context for considering the estimated market value.

From time to time in the past, the City has analyzed the value of JEA. Since the last time this analysis was completed in 2012, there are several factors that have worked together to improve the overall value of the enterprise. As discussed further below, the external market for utility assets has shifted, making investors willing to pay much more for assets in the market. At the same time, the JEA management team have reduced JEA's overall debt and improved the operation of the utility, including its relationship with its customers, which has substantially improved the value of the enterprise.

Today, the value of the JEA enterprise is generated almost entirely by the value of its customer base rather than its physical assets. In the market for generation sales, transactions have become far more scarce, and much of the value generated by those few that have been completed comes from an accompanying offtake agreement rather than the physical assets themselves.

As illustrated in the chart below, the price investors are willing to pay for electric and water utilities as a function of the earnings of the utility has grown steadily over the past decade. For the same regulated return on equity, investors are willing to pay substantially more today than they were 10 years ago.

[more here]

Return on equity for the utility is based on the current utility rate structure and associated utility revenue, amount of purchase price the acquirer is permitted by the Florida Public Service Commission, and cost savings that may be achieved by a strategic utility acquirer. The cost savings could be achieved

by, for example, consolidating utility overhead and management into an existing utility's administrative staff.

Objectives for the enterprise sale – typically established at the beginning of a sale process – can influence the value of a privatization. Common objectives of an asset sale have included maximizing upfront value subject to some common competing goals and constraints:

- Guaranteed employment: acquisitions commonly provide employment guarantees for existing employees for some period of time.
- Rates: Acquirers will often agree to keep rates the same or lower for some period of time following the acquisition. Rate regulation ultimately transitions fully to the Florida Public Service Commission thereafter. Rate constraints may have a significant impact on acquisition price.
- Headquarters location: The sale process can include certain requirements around utility ring-fencing and location of corporate headquarters, including a requirement to retain a Jacksonville-based headquarters office.
- Community impact: Requirements for charitable giving, volunteerism support, or other community-related goals can be included in the constraints established up front as part of the sale process.

In order to provide a range of estimates of value, Public Financial Management has analyzed the pro forma financial projections of JEA and applied the following constraints and assumptions:

- 5-year rate freeze in both electric and water & sewer systems
- No additional rebate to customers
- All employees retained at current salaries for two years. Note that due to current social security exemption for JEA employees, existing pension benefits cannot accrue to retained employees following the closing. One possible solution is to "buy up" two years of additional service in the General Employees Pension Plan at closing.
- Real estate issues can be satisfactorily resolved without substantial price impairment
- Mark-to-market of Plant Vogtle contract is applied against the sale price

The values shown below are indicative and intended to provide a range of possible outcomes. Should JEA elect to proceed with a privatization, the value of the enterprise will ultimately be best determined through a rigorous competitive sale process.

Buyers of utilities generally fall into one of two categories: strategic acquirers, desiring to grow or complement an existing operation by folding a newly-acquired operation into an existing operation, and financial acquirers, who are deploying capital to achieve a desired rate of return.

External market factors are drivers for each type of acquirer. For electric utilities, sales are relatively stagnant and sales growth alone does not provide most utilities with sufficient earnings growth to satisfy shareholders. Therefore, strategically acquiring utilities can provide additional earnings opportunities for acquirers. For financial players, continued downward pressure on rates of return in all sectors makes utilities attractive targets, allowing them to deploy substantial capital for relatively stable, low-risk returns, particularly in states with attractive regulatory environments like Florida's.

Over the past 24 months, most acquisitions of electric utilities have been completed by strategic acquirers, who are generally able to pay higher multiples for utility acquisitions than financial acquirers. M&A activity has been scarce for water and wastewater utilities. In the United States, few companies

have the financial size or wherewithal to acquire a utility of JEA's size. Global infrastructure companies and financial acquirers are likely to participate in a sale process for JEA.

Key Value Drivers for Sales Price - P

Summary of JEA Potential Value Ranges - P

Likely Buyer Profile - P

Net Transaction Value Analysis - B

Gross Proceeds

Required Use of Gross Proceeds

- Debt Retirement
- JEA Pension Obligations
- Potential Vogtle Liability
- Reserves for Other Potential Liabilities

Arriving at the net up-front proceeds that might be actually available from the sale, and discussion of any actual or potential liabilities that may remain.

Other Financial Considerations and Impacts on the City and Customers

JEA Thoughts – more to come from PFM

Rate Path

While a private utility is regulated by the Public Service Commission and is prescribed a specific methodology for rate setting, it is typical in an acquisition agreement to commit to a rate freeze for a specific period of time. Following any agreed upon freeze, future rates are set at the approval of the Public Service Commission

Currently JEA projects financial position and rates for ten years into the future. The electric system is projected to maintain steady rates until the mid 2020s, where there is upward pressure due to the Vogtle power purchase. The water projections maintain stable rates for ten years and beyond. Should a privatization occur and result in a rate freeze for a period of time, water and sewer rates would likely increase following the freeze to support an appropriate rate of return on the rate base. Conversely, following a freeze, electric customers may enjoy similar to lower rates depending on the treatment of the Vogtle contract in connection to privatization.

Employment and Economy

In 2013, the Northeast Florida Regional Council released a report titled "JEA Economic Impact Analysis". The study reflects the economic impact and value of JEA in Duval County. An analysis was conducted removing JEA related salaries, capital expenditures and the number of jobs from the Duval County economy. Based on this analysis, total employment decreased by 4,500-4,700 jobs, the Gross County Product decreased by $860-$910 million, and personal income decreased by $206-$310 million.

Environmental Liabilities/Risks *Jody*

Decommissioning and Asset Retirement Obligations *PFM*

Eligibility of FEMA Grants and Other Federal Aid *Ryan*

St. Johns River Power Park Shutdown

Under the terms of an Asset Transfer and Contract Termination Agreement ("ATA") between JEA and Florida Power & Light Company, JEA made certain reps and warranties and covenants to include legal existence, performance of obligations and conduct of business that remain in effect until the closing date of the transaction. Closing will occur subsequent to the dismantlement of the facility and remediation of the property and is expected to take place during the first quarter of 2020. The privatization of JEA could be deemed to be a breach or violation of such reps and warranties and covenants. Notwithstanding the foregoing, the ATA may be assigned with the prior written consent of the other party, which such party may withhold in its discretion.

Qualitative and Policy Impacts - J

JEA Thoughts – more to come from PFM

Economic Development

JEA's economic development policy is designed to support the economic growth of northeast Florida through active participation in both local and regional economic development efforts in coordination with the City of Jacksonville's Office of Economic Development, JAXUSA Partnership and other partner organizations. JEA's policy objectives include commitments to competitive rate offerings, service reliability, and business support resources that meet or exceed the needs of its business customers. Such objectives support community goals to grow existing business and attract new business.

Economic development prospects are treated in a manner consistent with similar JEA customers. Consideration of an economic development incentive evaluates a customer's demand on the utility system, economic impact, job creation, viable alternative locations, JEA's system capacity, credit quality and other factors. JEA's economic development incentives are ultimately designed to help provide an overall positive impact to JEA's customers and the community.

Many Florida utilities are supportive of economic development initiatives and offer rates programs that may be criteria specific or are designed to encourage growth within certain industries. Economic development programs may also be supplemented with comprehensive market analysis tools providing information related to customers, suppliers, demographics, labor force and consumer expenditure data.

Working Relationships and Synergies between City and Utility

The City of Jacksonville essentially controls JEA at the highest level, through the JEA Charter which is a part of the City's Charter (Section 21). The Mayor appoints the JEA Board members who are then confirmed by the City Council. The Charter may be modified by City Council by notice, public hearings and a two-thirds majority vote. (Fact check)

Historical background:

Electric Utility:

The electric department of the City of Jacksonville was made an independent authority of the City in 1968 as a result of City Consolidation. Differential electric rates between the City and County portions of the service area were one of the factors used in support of consolidation. Electric rates were levelized by customer class across the combined service territory shortly after JEA was formed. JEA had served customers in portions of west St. Johns County through territorial approvals from the FPSC. There have been a limited number of territorial swaps with FPL in northern St. Johns, northwestern Clay and western Duval County over the last two to three decades and earlier territory swaps with Okefenokee Rural Electric Corporation in northern Duval County and southern Nassau County. (Fact Check) JEA now serves most of Duval County and limited areas in Clay and St. Johns counties. JEA serves the City of Atlantic Beach, the Town of Baldwin and the Town of Orange Park through electric franchise agreements.

Water/Wastewater Utility:

The water and sewer department of the City was transferred by Ordinance to JEA in 1997. At the time, the utility needed significant upgrades and the Council found it hard to raise rates to cover the needed costs. There had been an on-going effort in the City to acquire smaller water and sewer utilities to be able to provide similar service levels and rates as the City offered. JEA continued that effort by acquiring most of the remaining larger private utilities within the COJ service districts in the county (Ortega Utilities, United Water, Florida Water). JEA also expanded service into northern St. Johns County with the approval of City Council and the County government. Through a series of approvals and acquisitions, JEA purchased JCP Utilities (Julington Creek Plantation), and later acquired the St. Johns and Nassau customers from Florida Water and United Water. JEA also made a similar purchase of existing customers and expanded service territory in Nassau County through its acquisition of United Water. JEA serves minor portions of Clay County in the northern Oakleaf Plantation area. The cities of Atlantic Beach, Baldwin and Jacksonville Beach serve their cities as well as Neptune Beach for water and wastewater service. There are a few remaining private utilities in the City of Jacksonville.

Current State

The City Council approves JEA board member appointments, JEA's annual budget which includes its total permanent employee cap, JEA labor agreements (five) and bond issuance caps. The City Council must approve any new business lines not already allowed in the JEA Charter and has an opportunity to seek a share of revenues through additional contribution for successful business line expansions. The City, including the Mayor's Office and City Council, and JEA agree on a contribution formula, currently set with a floor and typically set with a guaranteed annual increase generally every five years.

The City and JEA have partnered over the years on several initiatives and projects. Perhaps the most important was the transfer of the water and sewer utility to JEA in 1997 as mentioned above. The City and JEA are currently partnering on the latest septic tank phase out program including program funding and JEA providing project management and outreach. JEA acted as the City's program manager on the Better Jacksonville Plan (BJP) septic tank phase out program in the 2000s. JEA managed those projects including design, construction and project outreach. JEA acquired over XXXX acres of land as buffers or adjacent to JEA facilities in parallel with the City's Preservation Project as part of BJP. The City and JEA partnered on the Water and Sewer Expansion Authority creation and dissolution from 200X to 2011. JEA also partnered with the City on the transition of Cecil Commerce Center (formerly Cecil Field) including planning for the transition. JEA purchased land from the City for JEA plant sites to serve Cecil Commerce, rebuilt the electric system and upgraded and expanded the water and sewer systems all at JEA expense. In the late 90s/early 00s, JEA constructed and financed the First Coast Radio System to assist in emergency operations for the City, JEA and other users.

Although atypical among municipally owned utilities, JEA and the City worked together to implement a 3% franchise fee on electric, water and sewer revenues. The franchise fee was designed as a pass-through so as to not affect JEA's rate structure or its financial standing in the market place and has been in effect since April 1, 2008.

In 2007, JEA worked with the City Council to create a voluntary overhead to underground conversion program. The applicable ordinance allows property owners to have overhead electric and communications facilities placed underground adjacent their property. Project costs can be paid upfront or over a 10 or 20 year term where JEA provides the capital and an annual fee is assessed on the property tax bill. The program remains in affect with multiple projects complete, in progress or exploratory stages.

Recently, JEA and the City have partnered on several projects including the LED streetlight conversion program which is an initiative to convert all streetlights City wide to LED fixtures. JEA incurs the upfront capital for the program and the efficiencies achieved by the conversion will result in significant savings on the City's electric bill. As a result of JEA's operational efficiencies and advancements in the wastewater system, JEA is able to provide Total Maximum Daily Load (TMDL) credits to the City which are critical to the City's compliance with applicable laws. Additionally, JEA provides multiple services to the City including treatment of the City's leachate, processing and review of the City's wireless facility attachment applications and chilled water to several City facilities.

The City and JEA coordinate continually on projects that involve multiple agencies for upgrades, widenings, expansions, maintenance and repairs. JEA in recent years has typically paid the City market value for lands it needs for system improvements including easements, lift stations and the like. JEA also coordinates with City Council or City departments on customer service issues, including maintenance, projects and initiatives and works with the City on policy related matters.

Policy Considerations and Differences

The City and JEA attempt to find mutually beneficial solutions on policy and funding levels and responsibilities. There are pressures on both entities for policy exceptions, policy changes which often require significant additional and scarce funding (more septic tank phase out, overhead to underground conversions, new development funding assistance, economic development assistance) and relaxation or

revisiting standards. JEA was separated to be able to perform more like a business, to set rates without undue political pressure and manage the operations and finances of the entity from a long-range planning and business perspective. The City has constant pressures for more funding for important community needs and goals with limited ability or resolve to raise additional revenues given competing desires for cost of living affordability, proactive and stable business environment, and balancing limitations of government role.

Going Forward/City Role in Utility Activities and Impacts

Renewable and Carbon Objectives

Generally utilities have elected to pursue renewable and carbon reduction goals themselves when economics and output make sense from a geographic fit and rate impact perspective. While renewables (solar and wind) have evolved over time for effective, efficient outputs, pricing has recently started to fall because of scaling and competition. Also, federal and state incentives have played an intended role in the widespread construction of renewables. Hydropower is generally considered a renewable source but is not feasible in most parts of Florida.

Several states were early adopters of renewable goals that transitioned into mandates and as a result have stronger more widespread renewable markets. Many of those states are often in regional transmission organizations that aid in dispatch of the renewable energy into energy markets.

Florida had traditionally not been as well situated but has seen a recent increase in construction and plans for additional utility scale solar installations due in large part to improving technology (outputs) and steadily falling costs. Federal tax incentives continue to play a significant role in this deployment. Both munis and IOUs weigh the cost of solar against other generation technologies in choosing generation choices. Munis generally consider the cost balance and impact on rate base before making those decisions; investor owned utilities also must justify these costs to the FPSC as compared to other technologies.

JEA was an early adopter of utility scale solar in Florida, first at small scale installations (schools, airport, chamber of commerce and zoo) more as pilot and demonstration projects. Those small scale projects allowed JEA to study solar integration into the electric grid over time. JEA entered into a purchase power solar arrangement on JEA owned land, one of the larger Florida installations at the time. The cost of that project was X times in 2010 as compared to the cost of solar installations today. IOUs and munis, including JEA, are entering into significant utility scale solar installations at this time. The economics of better technology and falling solar panel and equipment pricing now make solar competitive with other fuel sources. Solar continues to provide real time energy when it is available but does not provide firm capacity because of its intermittent nature. As storage technology improves, solar may in the future be counted on for capacity.

City Role in Utility Activities and Impacts

The City's role in utility related matters would likely be reduced greatly with ownership by IOU(s). There would continue to be coordination required on major projects, utility locations and relocations and economic development prospect projects. The City would be involved on zoning and land use matters for plant siting as it is now. The City would have little involvement, which might be viewed as a relief or

a loss of impact/control, on customer related matters including rates, billing issues, customer connections/disconnections and corporate policy reviews/inputs.

Consideration of the use of proceeds from any sale should be balanced with protecting a stable income stream and local control. The flexibilities allowed in negotiating contribution formulae and ability to provide additional one time or creative funding additions (such as the JEA franchise fees) would not be available going forward. Financing for projects that benefit the City, community and utility such as the radio system would also likely not be possible.

The City's role in continued municipal ownership would likely remain similar but perhaps with increasing pressures on the utility to do more in the way of services and contributions. The general relationship as cited in "working relationships" above is one of balancing the intent of having a separate utility entity for business and political purposes but the City exercising more or less authority on the utility in view of each entity's purpose and missions.

For the electric utility, a comparison can be made to other communications and cable television providers in the amount and types of interactions from the City's perspective. Coordination on fire hazards or other major electrical issues with City departments such as the fire department and city housing, where residents might be displaced may be more of a challenge but are infrequent occurrences. Hurricane preparedness and response may pose a challenge in less coordination but would likely provide similar outcomes at the end of a storm - restoration times, customer side repair coordination, tree clearing and removal. Customer support for customers in need (low income) is well coordinated with City and non-profit agencies providing emergency support, it is unknown how this coordination would be impacted.

For the water and wastewater utility, there would generally be a larger loss in control for long term project planning such as septic tank phase out and infill development. The City and its communities have struggled for decades on how to fund central water and sewer in older established neighborhoods. When water and sewer was a department within the City, water and sewer revenues did not fund capital expansion projects. That funding and installation of infrastructure continues to be a major challenge.

Investor owned utilities will not be able to pay for neighborhood expansions without recovering the capital costs through rate differentials for the customers that benefit or receive the expansions. The general rate structures are similar between munis and IOUs in that costs are recovered for the existing system serving an existing customer base with related upgrades and capacity increases. The rates generally do not include a component for expansion for neighborhood/development specific installations.

The City and JEA acquired several private utilities over time due to rate differentials and service levels for important basic services. Service level agreements and stability of the water and wastewater utility are important considerations in any decision or conditions to a sale for protection of the community, it citizens and the environment.

The City and JEA have also partnered on project and program deployments as mentioned earlier. JEA has served as program manager for BJP and other septic tank phase out projects including managing planning, procurement, design, construction and outreach. A similar function would need to be housed

at the City or through a contractual arrangement with an investor owned utility to manage projects going forward.

Overall, the City would have limited input and control over service levels and policy considerations and little input into rate setting for each business area. Rate setting, long range planning, and customer service levels would be regulated fully by the FPSC.

Running the Numbers - B

JEA Thoughts – more to come from PFM

City Perspective

Currently the City of Jacksonville has three primary funding sources from JEA into the General Fund:

- JEA Contribution. JEA contribution is a payment to the City in lieu of taxes. The current formula for the annual contribution is based on a millage per units sold, including a floor formula of one percent growth from the FY16 contribution. The contribution in FY18 is expected to be $116.6 million.
- Franchise Fee. The JEA franchise fee was implemented in 2008 as an additional revenue source for the City. It is unique among municipal utilities but more common where communities are served by investor-owned utilities. The current JEA franchise fee is 3% of certain revenues and is expected to be $39.5 million in FY18.
- Public Service Taxes. This tax, provided for under Florida state law, is equal to 10% of a portion of utility purchases (generally, electric and water but excluding most fuel and sewer charges). It is commonly levied in service territories served by both municipal and investor-owned utilities and is expected to be $88.5 million in FY18.

Property Taxes vs. City Contribution

As a municipal utility, JEA does not pay property taxes on its land and assets; its contribution is in lieu of taxes. Should a private entity take the place of JEA, the taxable assessed value of property in Duval County will increase by approximately 10% (the addition of ~$5bn net capital assets on the City's ~$50bn taxable base). Based on current millage rates, this increase in assessed value will equate to approximately $101 million of additional property taxes receipts[1], of which $63.5 million would go the City of Jacksonville General Fund. Florida public school funding requirements state that the increase taxable assessed value in Duval County would trigger an offsetting decrease to the Duval County school millage rate of up to 0.5 mills. This decrease in millage would result in a property tax cut to Duval County taxpayers of approximately $24.5 million. However, Duval County schools would still see an $11 million increase in funding from a privatization because the capital fund portion of property tax revenues is not subject to the same millage offset. $2 million in additional revenues would go to other governmental agencies, such as the St Johns River Water Management District.

[1] Max Marburt, *Property Appraiser: If JEA Goes Private, City Would Lose Millions in Revenue,* Jax Daily Record (December 11, 2017), https://www.jaxdailyrecord.com/article/property-appraiser-if-jea-goes-private-city-would-lose-millions-in-revenue.

Franchise Fee

While JEA's 3% Franchise Fee is unique among municipal utilities, it is more commonly assessed on investor-owned utilities in amounts up to 6%. The current city contribution is collected as part of JEA's annual revenue requirements. Because the property tax obligation is less than the current city contribution, the privatized utility would have a lower revenue requirement. JEA estimates that the franchise fee on the privatized utility could be 4.5% and keep overall utility bills unchanged.

Public Service Taxes

Public Service Taxes are common on both municipal and investor-owned utilities and the calculation of tax to the City would be similar in either case.

The table below compares the transfers to the City from JEA during the last fiscal year to the revenue the City could theoretically have received from a private utility. A private utility would have contributed approximately $52 million less in FY17 than JEA's payment to the City General Fund (or $32 million and $12 million less if the Franchise Fee were increased to 4.5% and 6% respectively). The Duval County school board would have received $11 million more in capital fund revenue and Duval County taxpayers would have paid $24.5 million less in property taxes.

($ in thousands)	***JEA***	***Private entity***
Contribution from JEA to COJ	*$115,823*	
Franchise Fees (Currently 3%, Private 4.5%)	*39,887*	*59,887*
Public Service Taxes	*86,896*	*86,896*
Estimated Property taxes to City of Jacksonville	*0*	*63,500*
Total Contribution to the City General Fund	***242,606***	***210,283***
Difference to the City General Fund		***(32,323)***
Difference to the Duval County school board property tax revenues received		*11,000*
Difference to other governmental entities property tax revenues received		*2,000*
Decrease to Duval County Taxpayers property tax paid		*(24,500)*

Customer Perspective

Rate Freeze/Reduction and Timing

Rate Flexibility under JEA vs. Private Ownership

JEA provides local control in regards to rate setting. One example of this control is the establishment of a fuel reserve for purposes of fuel rate stability for customers. The Public Service Commission has a prescriptive methodology for recovering fuel expenses that does not provide an allowance for funds such as this.

Appropriate Discount Rate

Service Quality

Municipal utilities inherently have a priority to their community, especially in regards to things such as customer service, power quality and reliability and the relationship with the municipality. Conversely, an private utility has priority pledged to provide an equity return to investors while operating within the confines established by the Public Service Commission.

Alternative Privatization Structures - P

JEA Thoughts – more to come from PFM

"Privatization" can mean a variety of structures resulting in private sector involvement in the utility's operation. Privatization structures could include

- Sale of generation assets only. Under this option, JEA would sell all its electric system generation assets but retain its transmission, distribution, customer relationships, and entire water & sewer system. This type of privatization is typically coupled with a Power Purchase Agreement, whereby JEA sells its generation to a third party who, in return, agrees to supply all of JEA's power supply needs for a contractual period of time at a contractual price.

  Under a generation asset sale, the value received is highly dependent on the terms and conditions of the Power Purchase Agreement. Proceeds could be applied against JEA's outstanding electric system debt to cushion any financial impact on JEA customers.

  Example of generation privatization: North Carolina Eastern Municipal Power Agency (2014?)

- Operations and Maintenance contract. Under this option, JEA would continue to exist as a legal entity with a skeleton staff primarily responsible for contract management, financial reporting, and long-term strategic decision-making. All utility operations are contracted to a third party who is responsible for the day-to-day operation of the utility.

  The value derived from an O&M contract (near-complete outsourcing) could be derived from a difference in contract price versus insourced total operating expenses. This value is not clear at this time. Outsourcing can also be accomplished for a subset of utility operations rather than for the entire utility, and these opportunities are periodically analyzed by JEA.

  Example of O&M privatization: Long Island Power Authority (2011)

- Enterprise sale. Under this option, the entire JEA enterprise – electric enterprise, water/sewer enterprise, district energy system, or all three – is sold to a third party. After regulatory approvals are received and all outstanding debt obligations of JEA are redeemed, proceeds are transferred to the City of Jacksonville and the ownership and operation of the utility(ies) is transferred to the third party acquirer. This can result in an operation that is ultimately folded into an acquirer's operation, or some independence in operation may result, including retaining a corporate headquarters located in Jacksonville.

  This option and the concession described below will be the primary focus.

  Examples of utility privatizations: City of Vero Beach (pending)

- Concession agreement. Under a concession agreement, the City gives a third party the right to operate utility assets for a specified period of time, typically very long term (30-50 years). This commercial structure is more common for water & sewer utilities than for electric utilities. The risks and benefits of a concession are similar to an enterprise sale with a key difference: at the end of the term of the concession agreement, ownership of the utility reverts to the City. Concession agreements can encompass all assets of a system or just a subset of assets, for example, just vertical assets of the Water & Wastewater System.

  The value of the concession agreement is established similar to the value of an enterprise sale.

  Example of utility concession: [CA example from GS]

- IPO Option. The City could choose to convert JEA to a corporation and recapitalize the business through an Initial Public Offering. This would have the effect of maintaining an independent investor owned utility headquartered in Jacksonville. The community would enjoy the same economic impact to the region that is currently provided by JEA and the City would have a new Fortune 1000 company headquartered in Jacksonville. This structure presents a number of complexities that would need to be solved. Typically, in an IPO the owners would only offer a portion of the stock on the market and retain a significant portion of ownership in the company. Under Florida law, cities cannot own stock in a corporation, which means the City could not hold the remaining equity after an IPO. The City could make a contribution of JEA stock to the pension funds and lower the required ongoing pension contributions. Alternatively, the City could explore setting up a public trust to hold the stock for the benefit of the community on a perpetual basis. There are also several operational impacts to JEA in regards to new regulatory requirements from the Public Service Commission and the Securities and Exchange Commission among others.

- Recapitalization of JEA. Rather than a sale, it is possible for JEA to re-leverage its balance sheet, allowing the City to extract substantial value from JEA's equity position. JEA's credit rating would be downgraded, reflecting the increased debt position. This leverage could be structured to allow for stable rates over the same time period as the rate guaranty but would require future rate increases to repay this borrowing. Although it is unlikely to lead to as large a capital transfer to the City as an outright sale of the enterprise, this recapitalization would allow the City to retain local control over the utility and is relatively simpler to execute.

The Process – B (Legal Advisor?)

JEA Thoughts – more to come from PFM

Timeline

Once all documentation around the utilities' operation, legal issues, financial disclosures, and other materials are fully prepared, a sale process can proceed. Generally, sale processes proceed in four phases:

Phase 1: Engage advisor, prepare sale process, resolve legal, regulatory, and other obstacles prior to proceeding. This phase will include resolution of the issues discussed later in this section. During this

phase the determination will be made around whether it is optimal to proceed with a single sale process for the enterprise as a whole or to engage in separate processes for each utility system.

Phase 2: During this phase, JEA receives indications of interest from the acquirers most likely to participate in the next phase of the process. This includes a comprehensive management presentation to potential buyers, and discussions/meetings to determine interest and financial and execution wherewithal. Following this phase, JEA and its advisor will narrow down the acquirers to participate in the second phase of the bid process.

Phase 3: Due diligence and final bids are completed during this phase. The potential acquiring companies undertake a significant due diligence effort and submit final bids. Bids are scored against pre-determined criteria to recommend a successful acquirer and the acquisition contract is negotiated.

Phase 4: Regulatory approvals following the completion of a bid process can be lengthy (in excess of a year). Approvals may be required from FERC, NERC, the Florida Public Service Commission, and other regulatory agencies, as discussed more fully in the Regulatory Risk section.

[insert COJ approval process]

Major Considerations and Challenges to Executing a Transaction - J

JEA Thoughts – more to come from PFM

A privatization of the JEA enterprise likely represents the largest and most complex municipal privatization in the United States. Privatizations are complex to undertake and often take years to complete. Below is a discussion of several of the execution complexities JEA will likely encounter if a privatization is undertaken. No issues have been identified to date which will prevent a privatization altogether, but each of these will have to be carefully considered and mitigated if a privatization moves forward.

Operational

Employee

Privatization process are typically difficult transitions for employees. A JEA privatization would be particularly impactful due to several unique factors, including the public nature of the process, challenges with retention of employees, and the unique pension structure (and associated social security exemption) associated with the City of Jacksonville.

Regulatory

JEA currently operates under a regulatory construct unique to municipal utilities. If a privatization were to occur, the regulatory transition would have to be carefully managed to ensure compliance both before and after privatization with all applicable regulations, including operational, security, technology, environmental, and financial.

Contracts and legal

There are a number of outstanding contracts and property rights that would be affected by a privatization of JEA. These include power purchase agreements, interlocal agreements, and real estate easements. A privatization would necessitate a complete review of all outstanding agreements. We have identified several specific items that would need to be addressed as indicated below.

Plant Vogtle Power Purchase Agreement

JEA entered into a 20 year power purchase agreement with the Municipal Energy Authority of Georgia ("MEAG"). The contract obligates JEA to pay for all incurred costs associated with JEA's share of the capacity and energy output over the 20 year period. As written, this contract does not contain a provision discussing change in control of either party to the contract. A change in control may require a complex restructuring of the contract. [One of the covenants obligates JEA to not do anything that would adversely affect the tax-exempt status on the bonds that MEAG has issued to finance the facility. The bonds would no longer be tax-exempt if a privatization of JEA resulted in JEA or its successor organization being a taxable corporation. The capacity and energy from plant Vogtle would be required to be consumed by a municipal utility in order to maintain the tax-exempt status. Given the expected cost of the capacity and energy it is unlikely that MEAG or JEA would be able to find a replacement buyer to step into JEA's obligations under the agreement at the same terms. JEA has identified several possible solutions to leave the Vogtle contract intact in the event of a privatization; however, these possible solutions require substantial legal due diligence. – Edits to come post Nixon discussion]

Interlocal agreements

JEA has active interlocal agreements with Nassau and St. Johns counties that grant JEA the right to provide water and wastewater service to current and future customers in specified areas. Each of these agreements have a change of control provision that gives each county the option to purchase the portion of JEA's water and sewer assets in each county if there is a change of control for JEA. Once JEA submits a notice of intent to sell, these individual counties would have 90 days to exercise the first right of refusal to purchase all assets in their respective areas. The purchase price for these assets is the lower of 1.) the purchase price JEA intends to sell to a third party, or 2.) 110% of JEA's net investment.[2] Currently, sales from customers within these counties represent approximately 12% of JEA's water and sewer billed revenues.

This Right of First Refusal will need to be included in any sale process and represents a process complexity for a potential acquirer.

Property issues

JEA has thousands of property rights contracts, many of which contain complexities around ownership, transfer rights, and division of property rights should a privatization occur. Four examples of the types of property issues that will need to be vetted and resolved prior to completing a sale process are described below.

Electric Franchise Agreements

Real Estate

[2] Net investment equals JEA's capital investments less depreciation.

1. Identification of Real Estate Interests:

    - Fee, easement, license, leasehold, and other interests related to electric, water and sewer, preservation, surplus, and third party income producing. What procedures will be used to identify and categorize all interests of JEA, and to determine which interests transfer in the event of which type of sale?
    - Interests exist which are not documented in a traditional manner for private use. The primary example involves how a private company uses public right-of-way. Will need to review title issues related to right to use public right-of-way.
        - JEA's charter gives it the right to operate utilities within public right of ways in the City of Jacksonville. In addition to Duval County, JEA operates utilities within the public rights of way in St. Johns, Clay, and Nassau Counties pursuant to [franchise agreements? Consent of the jurisdictions?]. It is not clear whether a purchaser would need separate authorizations from each of the jurisdictions in the service territory to enjoy the right to utilize public rights of way, or whether such rights could be assigned along with the purchase.

2. Easement Issues:

    - Sufficiency of easement rights in general for JEA to engage in all current uses.
    - Whether easement terms allowed expanded uses beyond electrical/water/sewer (i.e. fiber and third party uses), such as "all utilities" or "incidental uses."
    - Whether such easements are assignable to purchaser. Older documents/easements appear to be more restrictive with respect to assignability or partial assignability.
    - Whether it is possible to separate the easement rights for separate transfers of utility functions.
    - Whether the easements are adequately in the name of or run to the JEA.
        - JEA is the successor to numerous utility companies in the service territory, including United Water and Jax Suburban Utilities. JEA still operates facilities pursuant to easements originally granted to predecessor entities, some of which have been expressly assigned pursuant to recorded documents, and some of which are deemed assigned pursuant to JEA's acquisition.

3. Corrective Matters and Future Interests
    - If corrected documents are needed from the City, such as quitclaim deeds and assignments of easements, will the City have an ongoing obligation to cooperate and how would that be documented?
        - Prior City ordinances associated with the transfer of the City's water and sewer system to JEA contemplated future conveyances and assignments from the City to JEA to fulfill the intent of the transfer, and authorized execution of documents by the mayor. It is not uncommon for former water/sewer sites to require a quit-claim deed from the City to clear title in JEA's name. This issue usually arises when property is declared surplus and is to be sold.
    - In many City parks (and maybe other City lands), JEA has pump stations and pipes without easements or separate fee ownership. Similar to the public ROW issue, but different considerations. These rights will need clarification and potential corrective procedures put in place.
    - Right to reserve easements in the event of street closure.

- As a matter of practice and custom the City currently requires JEA consent to street closures, and in most instances an all utility easement is reserved to JEA in the closure ordinance. It should be considered how this could be carried over to a private purchaser.

4. Water and Sewer System Issues
   - Title issues will need to be reviewed related to acquisitions from both the City and private utility companies – and whether ownership interests can be adequately transferred to a purchaser.
   - Issues likely will need to be resolved with respect to potential separation of water and sewer system from electrical system.
     - Separation of easement rights: In many areas, particularly in large transmission line corridors, JEA's operates water, sewer, and electric utilities pursuant to one "all-utility" easement instrument. There is the potential to have to "partially assign" the electric easement rights and the water/sewer rights to the new utility entities.

5. Revenue Sources Unrelated to Electrical/Sewer/Water Services
   - Third-party agreements exist for use of fiber and communications facilities.
   - Would these facilities, rights and interests be acquired by the purchaser?
   - Some of these facilities are essential to the provision of utility services, so would they go to the purchaser even though there is supplemental third-party income that arises therefrom?
   - How would the valuation be adjusted to reflect such income?
   - Would private ownership of these facilities impact rates charged and impose additional regulations?

6. Surplus Property
   - Would surplus properties be transferred in connection with the sale of utility facilities?
     - JEA's procurement directives require surplus property to be offered to other municipal agencies prior to advertising the property for sale.
     - Would pending sales likely fall outside of any transfer?
     - Would liabilities (such as environmental) relating to transferred properties be retained by JEA or transferred to purchaser?

7. SJRPP Decommission
   - Will JEA receive the land? If so, will land be retained/transferred similar to other surplus property?
   - Any ongoing liabilities, such as environmental, and will this transfer to the purchaser?

8. Private Solar Leases on Preservation Properties
   - Will these properties be transferred in connection with a sale?
   - Are leases transferrable?

[insert info from DE]

Intertwined Assets

(Very) High Professional Fees (Adivsors, Lawyers, Engineers)

Extended Time Frame – Across years and office terms

Potential Break-Up Fees

Utility Rates in a Regulated Environment – What to Expect - B

Discussion of rate setting process between JEA & FL PSC

Summary - P

JEA Thoughts – more to come from PFM

This discussion of complexities is not meant to be comprehensive. In fact, given the size and complexity of the privatization JEA is very likely to encounter additional obstacles that have not yet been identified. The decision to privatize JEA is ultimately a weighing of trade-offs. The City can potentially receive a substantial up-front payment at closing of the transaction in exchange for:

- Lower annual general fund revenue
- Loss of local control of utility rates
- Possible loss of customer service quality and commitment
- Less economic development participation by utility
- Loss of potential future partnership opportunities, such as Smart City initiatives, utility broadband, natural gas, community wifi, small cell, and other future opportunities
- Loss of control of energy policy direction
- [add more here from first section and council auditor's report]

Appendixes

Appendix 1: Additional considerations to ownership and regulatory frameworks of municipal and investor-owned utilities

I. Ownership

a. Utility system owned by local government entity
   1. Features
      A. Referred to as "public power", "municipal utility" or "muni"
      B. Owned by the local governing entity
      C. Institutional leadership and general direction established by and accountable to local elected officers or officials appointed by elected officers that serve in a voluntary purpose
      D. Ownership interest is indivisible
   2. Advantages
      A. Access to tax-exempt debt financing
      B. Local control supports local government's goals and aspirations
      C. Excess revenue remains in and benefits local government/economy
      D. Utility administration and policy development transparency
      E. Multiple local vectors for customer intervention in utility policy development and implementation (Mayor, City Council, utility's governing body)

F. Most feasible for combined operation of multiple utility systems (electric, natural gas, water) with available synergies
G. Less regulatory scrutiny

3. Disadvantages
   A. Enterprise activities must be for a "public purpose"
   B. Absolute preclusion or more difficulty in entity acquisitions, mergers and ownership interest conveyance
   C. Limited ability to keep administrative and operational matters confidential
   D. Authority of executive leadership is more constrained
   E. Leadership stability can be compromised by the local election cycle
   F. Less expertise available to provide regulatory oversight
   G. Less ability to influence state and federal level public policy impacting operations (can't contribute to political candidates)

b. Utility system owned by shareholders

1. Features
   A. Referred to as "investor-owned utilities" or "IOUs"
   B. Owned by stockholders
   C. Institutional leadership and general direction established by compensated and totally independent Boards of Directors comprised of individuals that have distinct industry, social or academic credentials
   D. Ownership interest is divisible
2. Advantages
   A. Can generate capital from debt markets as well as from selling ownership equity (stocks)
   B. Has a universally embraced and well understood preeminent purpose- to maximize shareholder wealth
   C. Executive leadership is less constrained and more agile
   D. Can keep administrative and operational matters confidential
   E. More expertise available for regulatory oversight
   F. More ability for influence state and federal level public policy impacting operations
3. Disadvantages
   A. Limited or no access to tax-exempt debt financing
   B. Easier entity acquisitions, mergers and ownership interest conveyance with facilitation provided by organized markets
   C. Increased likelihood of being acquired by another entity
   D. Less transparency in administrative and operational matters
   E. More regulatory scrutiny
   F. Bulky and time consuming process to increase revenue (rates)

II. Regulation

c. Utility system owned by local government entity

4. Features
   E. Retail prices and profit level regulated local governing body
   F. Rate structure (rate relationships among rate classes) is regulated by FPSC
   G. Wholesale prices not regulated with nominal regulation of transmission services by FERC

H. The need for generation and transmission investment has to be certified by FPSC
I. No regulatory determination of “rate base”
J. Authority to recover capital and O&M costs occurs with annual budget approval

5. Advantages
   H. Price and profit determination allows optimization in the value customers get from lower rates vs relief from ad valorem tax
   I. Simple public hearing format for rate hearings accommodates input from any customer regardless of credentials or legal sophistication
   J. Price discrimination and subsidies are precluded
   K. Price adjustments can occur routinely and as needed
6. Disadvantages
   H. Governing body regulators don’t always have the expertise or resources to assess prudency of some expenditures and investments
   I. Customers bear the risk of imprudent investment

d. Utility system owned by shareholders
   4. Features
      E. All retail service aspects, including prices and profit level, are regulated by FPSC
      F. Wholesale energy prices are regulated nominally by FERC. FERC regulates transmission services
      G. The need for generation and transmission investment has to be certified by FPSC
      H. Except for investment in nuclear generation, plant investment must be “used and useful” before its costs can be recovered
      I. Advanced cost recovery for nuclear generation can be approved by FPSC
      J. The hearings to set prices, profit levels and certify the need for new plant are rigid and structured and are held mostly in Tallahassee
   5. Advantages
      G. FPSC has staff with considerable expertise and sufficient resources to determine expenditure and investment prudency
      H. Risk of imprudent investment is borne by shareholders
      I. The State provides advocacy for customers via the Office of Public Counsel in regulatory matters
   6. Disadvantages
      G. Price and profit levels are not established to help achieve community or social goals
      H. Rate hearings are expensive, bulky and time consuming
      J. Lack of ability for a customer with limited legal sophistication to intervene in utility regulatory procedures