The Future of JEA: Opportunities and Considerations

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PUBLIC FINANCIAL MANAGEMENT
FEBRUARY 14, 2018
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Introduction

On November 28, 2017, in his final meeting as a Director of the JEA Board, Mr. Thomas Petway posed the following questions...

Would the customers of JEA and the people of Jacksonville be better served in the private marketplace?

Should JEA and the City of Jacksonville consider the financial benefits that would come from the privatization of JEA?

This topic has been raised and studied in the past. The conclusions of prior studies were that the City and the ratepayers would be better served by having JEA remain in place as a municipally-owned utility. But as Mr. Petway accurately stated at the November meeting, the utility market is vastly different than when JEA was formed in 1967. Further, the utility market is quite different than it was just five years ago when this topic was last studied.

The outlook for the future of the utility industry, and specifically for the electric utility industry, is as uncertain as it has ever been. Continued advances in technology will impact both energy demand and energy supply. Technology has led to tremendous leaps forward in energy efficiency, resulting in reduced energy demand; while potential growth in electric vehicle adoption could replace that demand in the upcoming decade. On the supply side, we have seen coal go out of favor due to environmental concerns, and nuclear due to cost concerns; while natural gas-fired and renewable generation costs have declined dramatically. The continued change could make the utility industry more volatile and riskier than it has been in the past.

The rapidly changing nature of the utility industry supports the need for the City and JEA to reevaluate questions that have been asked and answered in the past. As a result of Mr. Petway’s questions and suggestions, JEA’s new Board Chair Mr. Alan Howard made the following request of JEA’s CEO, Mr. Paul McElroy...

Take up that challenge, evaluate our prospective position in the marketplace, and report back on what the private market value of JEA may be so the citizens of Jacksonville and the mayor and other constituencies — City Council — can evaluate that opportunity.

JEA’s management team was given the directive to study this issue, and report back to the Board. One of the steps taken by JEA to respond to this directive by the Board was to commission Public Financial Management (“PFM”) to prepare a report that addressed a number of topics that are relevant to a decision that JEA and/or the City might make regarding the City’s continued ownership, or possible sale, of JEA. The goal of the PFM Report (or “Report”) is not to make a recommendation on whether to retain JEA, sell JEA or seek some other relationship between JEA, the City and JEA’s ratepayers. Rather, the goal of the Report is to inform the Board, the City and the Public as to several important considerations that must be evaluated in order to make decisions regarding JEA’s future. The Report does contain a range of potential values that the City might derive from a sale of JEA. It also includes a discussion of the key drivers of JEA’s potential market value, and it covers the required application of a portion of the sale proceeds that would reduce the gross sale proceeds to a net amount that would be available to the City. There are many other considerations that City leaders will evaluate that go beyond the question of “What is JEA Worth?”. The price a buyer might pay for JEA (or that separate buyers might pay
separately for JEA’s Electric, Water & Sewer, and District Energy Systems) is but one input to a more complex equation that arrives at the net long-term impact of a JEA asset sale on both the City and on JEA’s ratepayer “owners”.

The goal of this Report is to raise and address the other inputs to this complex equation, and to assist the reader in understanding both the quantitative and non-quantitative considerations relevant to a decision to retain JEA; or to proceed to the next step in the complex process of deriving the highest possible value from JEA for the City and the ratepayers.

The readers of this Report should consider the qualifications and background of the firm providing the Report. Briefly, PFM is the country’s largest, independent, full-service financial and investment advisor to the governmental and not-for-profit sectors. PFM has served as JEA’s financial advisor since 2002. PFM is independent in that it is not associated with any investment bank or commercial bank. The firm does not underwrite or trade municipal securities for its own account. PFM is not affiliated with and does not provide financial advisory services to private, for-profit utilities. PFM does not serve as a broker in asset sales and would not serve in this role should JEA sell any or all of its assets. PFM has particular expertise in providing financial advice to large municipal utility systems across the country. In the public power sector, PFM serves as financial advisor to well over half of the 50 largest public power systems in the United States. PFM is also the leading financial advisor to large governmental water and wastewater systems. PFM has assisted several of our clients in the evaluation of large asset sales and acquisitions. In some cases, these analyses have covered the sale of all of a utility’s assets. In a limited number of cases, the outcome of the process was a sizable asset sale or privatization arrangement.

Sales of municipal utility systems have historically been quite rare. There are significant economic factors that have long favored municipal ownership. In the past, PFM’s role in the analysis of a potential municipal utility system sale has often been to explain and quantify these economic factors. For JEA, its access to low-cost, tax-exempt debt, and its non-profit, cost-of-service business model provided considerable cost savings relative to for-profit utilities that: (1) had higher cost debt, (2) even higher cost equity, and (3) paid taxes on income. The utility industry had long been a very capital intensive business, and JEA’s distinct capital cost advantages delivered considerable value for JEA’s customers. The evaluation of municipal ownership or sale was often focused on capital cost advantages and their impact on current and projected utility rates. Not surprisingly, the projected rate differentials between municipal versus for-profit ownership led to a clear advantage for continued municipal ownership of large utility assets.

However, in recent years there have been considerable changes in both the capital markets and in the utility industry. These changes justify a new look at the old math that had always favored municipal ownership. In addition, there have been changes in JEA’s business outlook and financial structure that have made JEA more appealing to potential purchasers of utility assets. These changes necessitate a very different approach to this exercise than that of simply going through an explanation of capital cost and philosophical differences between public power and Investor Owned Utilities (“IOUs”).

This Report will provide an updated range of potential values of JEA to an acquirer. This value range reflects the changes discussed above as well as other market dynamics. The Report will also discuss: (1) information related to JEA’s utility systems, (2) a comparison of municipal and for-profit ownership, (3) utility valuation methodologies and approaches, (4) potential sale processes and timeline, (5)
complexities of the privatization process, and (6) the potential risks to, and impacts on the City from an asset sale.

As mentioned, the goal of this Report is not to recommend either selling or retaining JEA. It is to inform the Board and other community decision makers, and assist them in assessing the value of JEA. Throughout the Report, there is discussion of the City selling or retaining JEA. At no point in this Report does PFM assume a preferred outcome for any decision regarding JEA’s future. While it may be possible for isolated sections, or selected text of the Report to be read out of context, and be interpreted as expressing a view regarding the potential or preferred outcome of JEA’s and the City’s evaluation process, PFM is not expressing any opinion or assumptions as to the outcome of the evaluation process on the part of either JEA or the City.

This report is written primarily from the perspective that the City could choose to sell JEA’s assets in their entirety – including the Electric System, the Water & Sewer System and the District Energy System. This perspective is for the purpose of simplicity. It is possible that the City could sell only a single system, or any combination of the systems to one or more buyers. The determination of which systems to sell, if any, and whether they be sold jointly or separately, is not within the scope of this Report.

**JEA Asset Summary**

JEA is a not-for-profit, community-owned utility created by the City of Jacksonville to serve Duval County and surrounding communities. It is located in Jacksonville, Florida, and serves approximately 464,000 electric, 346,000 water and 269,000 sewer customers in Northeast Florida. JEA is an independent agency of the City of Jacksonville. JEA’s businesses are divided into three main systems: electric, water/sewer, and district energy. JEA provides reliable utility services to business and residential customers at an affordable cost, while remaining in compliance with environmental regulations.

JEA provides excellent customer service as measured by J.D. Power. By focusing on the customer experience, JEA improved its customer ratings over the past six years, and is now ranked in or near the top quartile in both business and residential customer satisfaction in the J.D. Power survey. JEA ranks #2 in business customer satisfaction in the state of Florida.

JEA’s Northeast Florida service territory is strong and diverse with little to no significant customer concentrations. Current median household income in the territory is roughly 85-90% of the national average. Real GDP growth for Jacksonville is on par with US real GDP growth. JEA’s average monthly bills as a percentage of its ratepayers’ household income are below the national average. JEA’s rates for both the electric and water/sewer systems are below the medians in the State of Florida. JEA’s competitive rate structure supports the region’s ability to capture significant new growth opportunities into the future.
Electric System:

The electric department of the City of Jacksonville was made an independent authority of the City in 1968 as a result of City Consolidation. 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.

The JEA Electric System consists of generating facilities located on four plant sites within the City of Jacksonville, and an interest in a generating unit in central Georgia. In January 2018, JEA shut down the St Johns River Power Park ("SJRPP") a plant co-owned with Florida Power & Light. JEA also purchases power from several solar installations in Duval County and a landfill facility. JEA has been authorized to purchase up to 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 lines 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’s electric system has been in operation since 1895 with a record of outstanding reliability and 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’s 464,000 electric system customers are in an area 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).
Water and Sewer System:

The water and sewer department of the City was transferred by Ordinance to JEA in 1997. At the time, the utility needed significant system upgrades and the City Council found it difficult to raise rates to the degree needed to cover the cost of the upgrades. There had been an ongoing effort in the City to acquire smaller water and sewer utilities to be able to provide similar service levels and rates as those offered by the City. JEA continued that effort by acquiring most of the remaining larger private utilities within the 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 St. Johns 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.
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 wastewater treatment facilities with a 241MGD peak capacity, 1,300 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’s 346,000 water customers and 269,000 wastewater customers are in a service territory spanning four counties (Duval, Clay, St Johns, Nassau) and include two major wholesale water customers. JEA also supplies reclaimed water to 11,000 customers.

Unlike many water and wastewater utilities, JEA has kept its system up to date by funding an appropriate capital investment program including: pipe replacements, system hardening, and constructing adequate capacity. While the need for large capital investments to update a neglected system is a common driver behind evaluating water and wastewater privatization, this is not the case for JEA.
**District Energy System:**

The District Energy System was established in 2004 and 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 Ownership vs. For-Profit Ownership**

Utility services in the United States are provided by three general types of utility enterprises: (1) for-profit, IOUs, (2) non-profit, governmentally-owned or affiliated utilities, and (3) non-profit, consumer-owned cooperative utilities. In the electric utility sector, most of the country is served by the IOU market, with only about 15% of the population served by public power utilities such as JEA. In the water/sewer sector, municipal utilities serve over 80% of the country’s population. From an economic perspective, each of the three utility structures shares the goal of meeting the needs of their “owners”.

Municipal utilities are owned by governmental entities, and operated to maximize value to the local ratepayer citizens. Municipal utilities operate on a cost of service basis, in that ratepayers are charged only for the costs required to deliver service. There is no requirement to charge ratepayers for profits and shareholder returns, nor must a municipal utility include provisions for federal and state income taxes in their rate structure. IOUs have an obligation to their shareholders to deliver profits and achieve targeted equity returns. IOUs also have to pay income taxes and property taxes.

The IOU structure carries the added cost of delivering equity returns to its shareholders. These higher returns often come with higher risk for the shareholder. In some cases, equity owners absorb costs that would have been passed on to customers in the municipal ownership structure. There are numerous instances where IOU shareholders have absorbed the costs that regulators did not allow to be passed on to ratepayers. Under a municipal utility structure, there is no shareholder “buffer” to absorb losses as an alternative to passing costs on to ratepayers.

Most utilities, IOU and municipal, generally have near monopoly status in their service territories. For municipal utilities, the cost-of-service business model precludes them from charging rates in excess of those required to recover their costs. Municipal utilities are also locally-governed by either an independent Board or an elected governing body; which leaves the utility answerable to local ratepayer interests. For IOUs, ratepayer interests are protected by state regulation that governs the IOU rate setting process in order to ensure that IOUs earn only a “reasonable” return for their shareholders. IOUs are allowed to earn profits, pay shareholders, and recover enough to pay taxes. The regulatory structure is in place to ensure that IOUs are not exercising monopoly pricing power in a way that allows for excessive shareholder returns at the expense of ratepayers.

The following table provides a comparison of the municipal utility and IOU ownership structure along a number of criteria:
<table>
<thead>
<tr>
<th>Municipal Utility</th>
<th>Investor Owned Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ownership</strong></td>
<td>Shareholders or investors, typically external to the service territory</td>
</tr>
<tr>
<td>Local government body and customers of the utility, usually limited to the service area</td>
<td></td>
</tr>
<tr>
<td><strong>Structure/Management</strong></td>
<td>Private company. Shareholder elected board appoints management team of private sector employees. Both may be external to the service territory.</td>
</tr>
<tr>
<td>Not-for-profit public entity managed locally by elected or appointed board members and public employees</td>
<td></td>
</tr>
<tr>
<td><strong>Rate Setting &amp; Regulation</strong></td>
<td>Customer rates are set and regulated by FPSC through a public process that includes some customer participation. Some regulation of wholesale rates. Customers represented by Florida Office of Public Counsel.</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>Mission/Goals</strong></td>
<td>Optimize return on investment for shareholders</td>
</tr>
<tr>
<td>Optimize benefits for local customer owners and local communities</td>
<td></td>
</tr>
<tr>
<td><strong>Financing</strong></td>
<td>Equity sales, bond sales, bank borrowing and retained earnings</td>
</tr>
<tr>
<td>Tax-free bond sales, bank borrowing, and retained earnings</td>
<td></td>
</tr>
<tr>
<td><strong>Investment in Capital Assets</strong></td>
<td>Own and operate assets or purchase service through contracts. Can be jointly owned.</td>
</tr>
<tr>
<td>Own and operate assets or purchase service through contracts. FPSC must certify need for facility investment. Can be jointly owned.</td>
<td></td>
</tr>
<tr>
<td><strong>Profit/Net Revenue</strong></td>
<td>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</td>
</tr>
<tr>
<td>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</td>
<td></td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td>Large in size and number of customers, complex geographic and customer mix.</td>
</tr>
<tr>
<td>Munis differ greatly in size and number of customers served. Local or regional geography and customer mix.</td>
<td></td>
</tr>
<tr>
<td><strong>Taxes and Contribution</strong></td>
<td>Pay state and federal income tax and local property taxes</td>
</tr>
<tr>
<td>Typically pay a payment in lieu of taxes or contribution to local government</td>
<td></td>
</tr>
</tbody>
</table>
Introduction to Utility Enterprise Valuation

In recent years, there have been a significant number of large transactions involving the sales and purchases of utility assets. These transactions have primarily involved energy assets and enterprises, such as integrated electric utilities, electric transmission companies, generating assets, natural gas pipelines and natural gas distribution companies. There have been only a limited number of transactions involving large water and wastewater assets.

Given the large number of publicly-traded energy companies, and the material number of mergers and acquisitions of energy assets, there is sufficient public data and history that enables analysts to estimate what JEA’s electric system may be worth to the private sector. There is not the same amount of market and price guidance for water/sewer utility assets. We can look to the energy sector for guidance on the value of JEA’s water/sewer utility. We can also estimate the water/sewer system value from stock prices and multiples of the publicly-owned water utilities. There are commonalities between the energy and water/sewer asset classes, such that asset prices in the energy sector provide helpful guidance for prices that might be paid for water/sewer assets. The values for the limited water/sewer transactions that have been executed, along with certain “non-electric” energy transactions, indicate that the values for water/sewer assets could be higher in terms of metric multiples than the values for same-sized electric utility assets.

One of the most commonly followed corporate market value metrics is the Price to Earnings ("P/E") ratio. This ratio compares equity value to a company’s earnings, and its stock share price to its earnings per share. It is essentially the price owners/investors are willing to pay relative to the annual earnings they expect to receive on their investment. A high P/E ratio indicates that investors are: (1) placing higher value for the same dollar of earnings, and/or (2) expecting that earnings for a company may grow in the future. The following chart provides an historical view of P/E ratios for Mid Cap Integrated Utilities. A Mid Cap utility is one that has market capitalization from $2 billion to $10 billion, and would be comparable to a utility of JEA’s size.
As the chart clearly demonstrates, there has been a pronounced upward trend in the valuations and prices paid for utility assets in recent years. The fact that multiples have increased means that stockholders and asset purchasers are paying as much as they ever have for utility assets. These high prices are not isolated to the utility market. Buyers of all types of commercial enterprises are willing to pay high multiples of earnings and attach high value to expected future cash flow. The stock prices and asset acquisition prices paid today are a function of both the amount of expected future earnings of a business, and the present value of those earnings to the buyer. The present value is determined by applying a discount rate or capital cost to the future expected earnings. These capital costs, and thus net present value discount rates, are near all-time lows for most potential buyers of utility assets. Most buyers would source their acquisition funding through a combination of debt and equity. Debt funding costs are still very low, in spite of a recent moderate increases in some interest rate indices. The cost of equity funding is also near all-time lows – especially for what are considered relatively low risk utility investments. Stock market indices have been steadily setting new all-time highs for the past several months. The market has sold off somewhat in recent weeks, although values remain quite high.

High stock prices mean low equity costs for companies issuing stock, or using stock as a currency for acquisitions. Interestingly, while the market cost of equity has declined considerably for many large regulated utility companies, their allowable returns on their regulated utility investments have remained relatively stable over time. This means that a regulated utility can fund an acquisition in the market with a combination of debt and equity that has a combined cost that is as low as any time in history. That utility can then earn a regulated return on the portion of that purchase price that is allowed into rate base. This allowable return on equity will be materially higher than the utility’s actual cost of equity. The acquiring utility can pay a price that is well in excess of the portion of the asset price that might be allowed in its regulated rate base, and still provide a market-based return to its shareholders.

Low financing costs have been a major contributing factor to the sustained amount of mergers and acquisition activity in the utility industry. Favorable capital markets have also enabled buyers to pay very high prices for utility assets.

Asset prices for utility transactions are generally expressed in terms of their values as multiples of Earnings, Earnings Before Interest, Taxes, Depreciation and Amortization (“EBITDA” or “Cash Flow”), or Net Property, Plant and Equipment (“NPP&E” or “Rate Base”) which is a proxy for the utility’s rate base and determines the return on capital an IOU would be allowed to earn by regulators.

Following is a summary of selected “headline” asset sales in the energy sector that have occurred in recent years:
Table #1: Recent Energy Sector Mergers and Acquisitions

<table>
<thead>
<tr>
<th></th>
<th>Sempra</th>
<th>Hydro One</th>
<th>Great Plains</th>
<th>Fortis</th>
<th>Dominion</th>
<th>Duke</th>
<th>Emera</th>
<th>Wider Industry Averages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sold</strong></td>
<td>Oncor</td>
<td>Avista</td>
<td>Westar</td>
<td>ITC</td>
<td>Questar</td>
<td>Piedmont</td>
<td>TECO</td>
<td></td>
</tr>
<tr>
<td><strong>Total Value</strong></td>
<td>$18.7 Bn</td>
<td>$5.3 Bn</td>
<td>$11.6 Bn</td>
<td>$11.3 Bn</td>
<td>$6.0 Bn</td>
<td>$6.7 Bn</td>
<td>$10.4 Bn</td>
<td></td>
</tr>
<tr>
<td><strong>Cash Flow Multiple</strong></td>
<td>10.5 X</td>
<td>11.8 X</td>
<td>11.0 X</td>
<td>13.8 X</td>
<td>9.6 X</td>
<td>14.9 X</td>
<td>9.8 X</td>
<td>~12 X</td>
</tr>
<tr>
<td><strong>P/E Ratio</strong></td>
<td>27.9 X</td>
<td>24.2 X</td>
<td>21.5 X</td>
<td>22.0 X</td>
<td>19.4 X</td>
<td>30.5 X</td>
<td>28.4 X</td>
<td>~25 X</td>
</tr>
<tr>
<td><strong>Rate Base Multiple</strong></td>
<td>1.7 X</td>
<td>1.7 X</td>
<td>1.8 X</td>
<td>2.0 X</td>
<td>2.2 X</td>
<td>2.5 X</td>
<td>1.7 X</td>
<td>~2 X</td>
</tr>
</tbody>
</table>

In addition to strong financial markets, there are other factors that create healthy demand for utility assets. As discussed later in this Report, there are various categories of potential buyers of utility assets. One category includes existing regulated utilities and energy companies – known as “Strategic Buyers”. These Strategic Buyers have strong economic incentives to acquire additional utility assets. One of the strongest incentives is to satisfy shareholders’ desire for growth in earnings. As is well known throughout the utility industry, technology advances and environmental concerns have led to declines in energy use by most consumer classes. When combined with a generally sluggish economy for the past decade, many utilities have seen sales decline significantly in recent years. This is not appealing to shareholders. For some utilities, the only way to generate material growth is through acquisitions. These Strategic Buyers are: (1) motivated to grow/buy, (2) have record low funding costs, and (3) continue to be able to earn attractive regulated returns for the portion of the acquisition price that is allowed into the rate base. These factors combine to create a motivated buyer base that has been paying high multiples of Earnings, EBITDA and NPP&E.

In addition to being able to pay a higher price than ever for a given cash flow or earnings stream, buyers are also interested in assets for which there is potential to grow cash flow and earnings. Some buyers will look at JEA’s cost structure and asset base, and have expectations of increasing revenues and/or decreasing costs in order to improve the cash flow return on JEA’s assets. The combination of low capital costs and the potential to increase cash flow, should make JEA an attractive acquisition candidate for many potential buyers.

As a cautionary note, for some potential buyers, “increasing revenues” can mean higher utility rates; and “decreasing costs” can mean reducing the labor force and a lower economic profile in the City. Conditions can be imposed upon buyers to limit the adverse impacts on both ratepayers and employees. The extent of these conditions can affect the amount a buyer will be willing to pay for a utility asset. Buyer conditions and stakeholder protections can be used to balance the desire to generate the highest value, while continuing to address the long-term best interests of ratepayers and citizens.

Potential new owners may also place significant value on JEA’s physical assets, as well as their strategic location that is near the geographic center of one of the stronger economic growth regions in the
Country. JEA has: (1) diverse, flexible generating resources, (2) land suitable for future resource development, (3) strategically located transmission lines, and (4) similarly attractive gas transportation assets. It would be reasonable for a buyer to look at these assets and assume they might be deployed more efficiently by an entrepreneurial, for-profit owner.

The combination of near-record stock prices and acquisition multiples, with JEA’s perceived potential for significant operational and strategic synergies, make JEA an extremely interesting target for any utility seeking to provide value to its owners. JEA is also attractive to non-utility investors that could borrow and leverage to produce very low funding costs, and invest those dollars to earn a higher regulated return on the portion of their investment that is allowed into rate base; such that the higher allowed return on this portion of the investment translates to a market-based return on the overall acquisition price.

**Traditional Valuation Methodologies**

One of the fundamental conditions that must be present in order to motivate a for-profit enterprise to purchase or acquire another business is that the transaction must provide the acquirer with the expectation that the transaction will be economically beneficial for its owners/shareholders. The transaction benefit is often described as being “accretive to shareholders” — namely the acquirer’s shareholders. In the private sector, which would include most entities that would have an interest in acquiring JEA, there are several methods by which potential buyers examine an acquisition to determine if the purchase would be beneficial to the buyer. These valuation methods generally compare the potential purchase price to measures of future cash flow (or net present value of cash flow), earnings, asset base or other financial metrics. Following are descriptions of several key valuation methods and metrics for utility mergers and acquisition transactions:

**Discounted Cash Flow ("DCF") and Discount Rate:**

Discounted cash flow analysis is a classic financial analysis used to value an organization. The analysis starts with a projection of free cash flow, to which a Weighted Average Cost of Capital ("WACC") is applied as a discount rate to determine the present value of the future cash flows, and thus the enterprise. DCF analysis is likely to be the most important exercise for prospective buyers. This would involve a thorough analysis that tests a wide variety of assumptions and sensitivities to arrive at a probabilistic estimate of the net impact of an acquisition on the buyer and their key financial metrics.

**Purchase Price as a Multiple of Earnings ("P/E Ratio or Multiple"):**

A pro-forma earnings projection is used to determine the expected net income if JEA were a private utility. This earnings number is multiplied by a factor determined by industry comparable public equity trading values and recent utility M&A transactions to determine the equity value of an enterprise. This value is then combined with the expected debt balance in the pro-forma capital structure to determine the enterprise value.
Enterprise Value as a Multiple of EBITDA or Cash Flow:

A pro-forma projection is used to determine the expected EBITDA if JEA were a private utility. The EBITDA number is multiplied by a factor determined by industry comparable public equity trading values and recent utility M&A transactions to determine the appropriate enterprise value.

Enterprise Value as a Multiple of Assets in Rate Base:

A pro-forma projection is used to determine the expected Public Service Commission approved rate base assets if JEA were a private utility. JEA’s NPP&E serves as a good proxy for an estimate of the assets for which the FPSC would allow capital cost recovery to a private, regulated utility. The amount of rate base is multiplied by a factor determined by industry comparable public equity trading values and recent utility M&A transactions to determine the appropriate enterprise value.

These multiples and ratios of Earnings, EBITDA and Rate Base are typically used to measure and compare various transactions. They often provide a “scorecard” comparison, as opposed to serving as the primary determinate of the price a buyer will pay for an asset.

Potential asset buyers will examine these metrics and compare them to their own business objectives and projections. Some buyers will examine a potential acquisition on a stand-alone basis – looking to see that the expected economic results deliver a sufficient return on funds invested in the new business. Other buyers will expect to incorporate the new business into an existing operation. These buyers will want to see that returns for their investors are higher for the combined business than for their existing business. But the focus will clearly be first and foremost on achieving investment returns and economic success for shareholders/investors.

At various times 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 potential market value of JEA’s utility assets. Buyers are willing to pay higher multiples of Earnings, EBITDA, and NPP&E. At the same time, the JEA management team has reduced JEA’s overall debt and improved the operation of the utility, including its relationship with its customers, thus substantially improving the value of the enterprise.

Key Value Drivers for Sales Price

As mentioned earlier, simply focusing on obtaining the highest possible up-front price for a utility asset, may lead to outcomes that are not optimal for the long-term customers of the utility if it is sold. New owners are likely to make changes that will impact utility customers and the City. Some of these changes may be necessary to generate earnings required to justify a high purchase price for JEA. In nearly every system sale, the seller or state regulators impose conditions on the sale that are designed to protect ratepayers, employees and the community from excessive change and unintended consequences of a new ownership structure.

Listed below are examples of common asset sale conditions or objectives that are designed to protect ratepayers:
- Guaranteed employment: acquisitions commonly provide employment guarantees for existing employees for a period of time to be negotiated among the parties.
- Utility Rate Guarantees: Acquirers will often agree to keep rates the same or lower for some period of time following the acquisition. Rate regulation for a buyer of JEA’s assets will ultimately transition to the Florida Public Service Commission. The pricing and duration of rate constraints may have a significant impact on acquisition price.
- Headquarters Location: The sale process can include certain requirements around maintaining a physical presence in a community, including the location of corporate headquarters.
- 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.

While these types of conditions, and others, are common in utility asset sales, conditions that are too onerous on the buyer could serve to limit the price paid for a utility asset. Any decisions related to a sale of JEA should include discussion and decisions on these items to ensure that there are not unintended consequences of a sale that adversely impact the community.

Overview of JEA’s Balance Sheet

Like JEA’s operations, JEA’s financial statements are divided according to the three utility systems and their respective 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 (SJPP). JEA maintains separate accounting records for the Electric System, the Bulk Power Supply System and its ownership interest in SJPP. 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 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.

JEA’s statement of net position, more commonly referred to as a balance sheet, contains relevant financial metrics that would be important to the analysis of an asset sale. JEA’s outstanding debt would have to be retired if its utility assets are sold. Portions of cash and cash equivalents on hand can be used to satisfy portions of the long-term debt obligations. Both assets and liabilities would be 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 or market values for JEA’s invested infrastructure assets.

<table>
<thead>
<tr>
<th>As of 9/30/17 (’000)</th>
<th>Cash and Equivalents</th>
<th>Long-Term Debt</th>
<th>Net Capital Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric System 1</td>
<td>$803,000</td>
<td>($2,328,000)</td>
<td>$2,687,000</td>
</tr>
<tr>
<td>Water/Sewer</td>
<td>$448,000</td>
<td>($1,625,000)</td>
<td>$2,616,000</td>
</tr>
<tr>
<td>DES</td>
<td>$7,000</td>
<td>($36,000)</td>
<td>$36,000</td>
</tr>
<tr>
<td>TOTALS</td>
<td>$1,258,000</td>
<td>($3,989,000)</td>
<td>$5,339,000</td>
</tr>
</tbody>
</table>

1 Excludes SJPP – shutdown January 2018
JEA’s income statement provides data that is also important to potential buyers. Purchasers will examine JEA’s income statement and develop estimates of the financial metrics that are key components of the “scorecard” metrics that are commonly used to compare utility asset transactions. While municipal utility financial statements do not translate directly to those of for-profit utilities, it is possible to estimate an approximate “run rate” for items such as Earnings and EBITDA should JEA be converted to a for-profit structure. PFM developed assumptions and ranges for JEA metrics that would be comparable to the for-profit, corporate equivalents of: Earnings, EBITDA (Cash Flow), Cash Flow and NPP&E (Rate Base).

**Summary of JEA Potential Value Ranges**

Recent utility stock prices and utility mergers and acquisitions provide *indicative* value ranges for JEA’s key assets. The comparable transactions listed in Table #1, as well as other utility market data, provide a range for utility transaction metrics and multiples that have been seen in recent years. PFM utilized market data to develop ranges for several metrics associated with the valuation methodologies discussed previously. It is important to note that the market data is derived from transactions among for-profit, non-governmental entities. None of the transactions that provide data are sourced from sales of governmental assets. Data points for asset sales of large governmental utilities comparable to JEA simply do not exist.

Applying a range of potential multiples to assumed financial indicators for JEA provides a range of JEA valuations that can be extrapolated by comparable transactions. However, as mentioned earlier, the Discounted Cash Flow analysis is the primary valuation tool that will be employed by potential buyers. They will use the multiples and metrics to “reality test” the DCF results, and compare them to other transactions. For this reason, PFM utilized a DCF modeling approach to develop a range of potential enterprise values. We use a range of assumptions for factors such as: capital costs, NPV discount factors, the duration of future rate guarantees, capital needs, growth rates, potential synergies and efficiencies, and valuation methodologies to determine enterprise value at the end of the test period, etc.

When we employ a discounted cash flow analysis, and apply the range of multiples observed in the market to reasonable assumptions for JEA’s key financial indicators, we arrive at the *indicative* value ranges for JEA’s overall enterprise as listed below:
Table #3: Potential JEA Value Ranges

<table>
<thead>
<tr>
<th>Valuation Method/Metric</th>
<th>Lower Values</th>
<th>Higher Values</th>
<th>Range of Indicative Total Enterprise Values for JEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discounted Cash Flow</td>
<td>$7.9 Bn</td>
<td>$10.1 Bn</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mid Discount Rate</td>
<td>Lower Discount Rate</td>
<td>Moderate Synergies</td>
</tr>
<tr>
<td></td>
<td>No Synergies</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Terminal Multi.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price Earnings Ratio</td>
<td>$8.5 Bn</td>
<td>$10.2 Bn</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low-Mid Multiple</td>
<td>High Multiple</td>
<td>Moderate Debt</td>
</tr>
<tr>
<td></td>
<td>Low Debt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash Flow Multiple</td>
<td>$7.5 Bn</td>
<td>$10.3 Bn</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low-Mid Multiple</td>
<td>High Multiple</td>
<td>High-Mid Cash Flow</td>
</tr>
<tr>
<td></td>
<td>Low Mid Cash Flow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate Base Multiple</td>
<td>$8.1 Bn</td>
<td>$11.0 Bn</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.5X Net PP&amp;E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.0X Net PP&amp;E</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Enterprise Value (S$Bn) 7.5 8.0 8.5 9.0 9.5 10.0 10.5 11

The indicative values provided above are based upon the assumption that the transaction would be completed in late 2019. This simplifying assumption allows us to pick a point in time that coincides with the end of JEA’s fiscal year and key debt retirement dates.

One of the first and most important things we observe from the table above is that the implied value ranges are VERY wide. The lower implied valuation is $7.5 billion, and the higher implied valuation is $11.0 billion – a difference of $3.5 billion. The upper end of the potential value range provides very large valuation numbers. The market and transaction data points that contribute to PFM’s assumed value multiple ranges are sourced from a wide variety of transactions, and market conditions. It would be optimistic to assume that the high end of the price range is the most appropriate starting point for JEA price discussions. JEA, as a large governmental asset, would be a more complex and challenging transaction than the majority of those that make up the data ranges. Later in the Report, we discuss the complications and considerations associated with a JEA asset sale, which may have an impact on potential buyer interest and value.

While there is good reason to manage expectations when approaching the sale of any large asset, it should also be noted that these lower and higher range figures do not represent the lowest possible or highest possible values for JEA. These are the figures supported by reasonable assumptions and historic price comparisons. However, JEA represents a unique, scarce asset, which is strategically located in an attractive regional utility market. Given the competitive nature of the utility industry, and the limited number of acquisition candidates, it is very possible that demand for JEA’s assets could produce a value that exceeds the higher value indicated by traditional valuation methods.

There are a number of factors that could drive JEA’s value toward the higher or lower end of any of the ranges listed above. Some of these factors would be in the control of the City as the seller. To the extent that the City elected to impose conditions on a sale that were economically or structurally unattractive to buyers, the value available to the City could be less than the figures provided above. It is also possible that market conditions could change considerably between now and the time the City
might attempt a sale. Current market conditions are better than they have been throughout most of the time that JEA has been in existence. There is no assurance that these conditions will prevail into the future.

The valuation ranges above are implied values for the gross transaction value for JEA. That is the gross or total price that might be paid. If JEA were sold, and received gross proceeds of $7.5 billion - $11.0 billion, JEA would then have to apply these proceeds, together with any cash and investments remaining at JEA, to retire its liabilities. In late 2019, JEA is projected to have debt of roughly $3.6 billion, and cash and investments totaling in excess of $1 billion on its balance sheet. A portion of the cash and investments may be required for business continuity and thus go to the buyer. The remainder of the cash and investments could stay with JEA and be available to offset remaining JEA liabilities.

The following section of the Report discusses the application of the gross proceeds, along with the deployment of remaining cash and investments to offset JEA liabilities, in order to arrive at the range of potential net proceeds to the City.

**Net Transaction Value**

The ranges of gross transaction proceeds listed above provide a first step in calculating the potential net impact for the City of a JEA sale. There are several JEA liabilities that will have to be accounted for before any funds can be released to the City. Following is a discussion of these liabilities.

**JEA Debt**

With the sale of JEA, the City would be removing the revenue source that was expected to service JEA’s current balance of almost $4 billion in debt outstanding. The debt balance in late 2019 is expected to be roughly $3.6 billion. In order to honor its contract with its bondholders, JEA would be required to retire all of its debt in order to accomplish an asset sale. Some of JEA’s debt, primarily its short-term debt, can be retired by simply paying the bondholder the face amount of the bonds they own. Most of the debt, like the majority of municipal bonds, has specific provisions by which the bonds can be retired prior to their final maturity and due date. The typical long-term municipal bond can be paid back (or “called”) prior to its final maturity date. Bonds cannot be called or paid off before this call date. However, the issuer is allowed to deposit investments in an escrow account to pay the principal and interest on the bond until the call date. This is known as “defeasing” bonds. The defeased bonds are still owned by the investors, but they are no longer the legal liability of the issuer. JEA will be able to retire its longer debt by allocating a portion of the gross transaction proceeds to the purchase of US Treasury investments that will pay principal and interest on any bonds that cannot immediately be paid off. The earnings rate on the US Treasury escrow investments will be lower than the interest rate on the defeased JEA bonds. This will lead the cost of the escrow investments to exceed the par amount of the defeased bonds. Based on market conditions for escrow investment securities, and the amount of JEA debt that remains outstanding, PFM has calculated an estimated overall JEA debt retirement cost of approximately $3.9 billion to retire JEA’s expected balance of roughly $3.6 billion of debt as of 10/1/2019.
Table #4: Approximate Debt Retirement Components and Costs as of 10/1/2019

<table>
<thead>
<tr>
<th>System</th>
<th>Electric and SJRPP</th>
<th>Water/Sewer</th>
<th>District Energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt Outstanding</td>
<td>$2.16 Billion</td>
<td>$1.42 Billion</td>
<td>$33 Million</td>
</tr>
<tr>
<td>Total defeasance cost</td>
<td>$2.31 Billion</td>
<td>$1.55 Billion</td>
<td>$35 Million</td>
</tr>
</tbody>
</table>

Other JEA liabilities

Certain other liabilities may also be settled from the gross proceeds of a JEA asset sale. Under an asset sale JEA would likely be required to terminate and settle the interest rate swap contracts. These contracts are in place to hedge a portion of JEA’s outstanding variable-rate debt. PFM has estimated that the termination cost of these contracts will be roughly $100 million in late 2019. The actual figures will vary from these estimates and be dependent upon market conditions at the time.

If JEA remains in place as an asset of the City, JEA expects to utilize the energy purchased under the roughly 20-year Vogtle power purchase contract to provide a substantial amount of carbon free energy to its ratepayers. JEA expects to pass the cost of this energy to its ratepayers pursuant to its fuel billing line item. In the context of an asset sale to a private entity, it may be necessary to remediate a portion of the Vogtle debt in order to achieve tax compliance related to tax-exempt bonds and Build America Bonds issued for the project. The net present value of the estimated debt service included in the Vogtle contract is assumed to range from $1.1 to $1.3 billion. The mid-point of this range, of $1.2 billion, is used as a very rough estimate of the potential net impact of the Vogtle contract on JEA. This range does not take into account possible legal claims or settlements related to the project, nor does it reflect assumptions related to final completion costs or in-service dates. We use this figure as a rough estimate for discussion purposes of what it could require for JEA to offset the cost of the Vogtle contract.

<table>
<thead>
<tr>
<th>Liability</th>
<th>Description</th>
<th>Estimated Amount</th>
</tr>
</thead>
</table>
| Interest Rate Swaps           | Mark to market estimate of certain interest rate hedge agreements | ~$80 million electric  
                              |                                                                     | ~$20 million water/sewer |
| Purchased Power Agreement     | Long Term Vogtle Purchase                           | ~$1.1 - 1.3 Billion NPV of Debt Service |

Remaining Cash and Investment

Based on the JEA’s projected financial metrics, it is expected that JEA will have well over $1.0 billion of cash and investments on its balance sheet in 2019. A review of the various accounts and projected balances supports PFM’s estimate that roughly $600 million of cash and investments would be available to supplement the gross sale proceeds, and could be used to retire JEA’s liabilities.

Based upon: (1) the indicative JEA value ranges of $7.5 billion to $11.0 billion provided in the prior section, (2) a projected 2019 debt retirement cost of roughly $3.9 billion, (3) an estimate of $600 million for the cash and investments that could be available to offset debt retirement costs, and (4) roughly $100 million of interest rate swap termination costs; the sale of JEA could produce roughly $4.1 billion to $7.6 billion net proceeds to the City. If JEA and the City elected to use a portion of the proceeds to remediate the Vogtle contract for an assumed cost of $1.2 billion, then the net proceeds to the City could range from $2.9 billion to $6.4 billion. Again, it is important to note that this range of net
proceeds is based upon a number of assumptions related to: market conditions, valuation methodology, transaction timing and potential use of proceeds. The actual results of a sale would depend on a several variables that cannot be determined at this time.

Likely Buyer Profiles
The potential buyers of JEA’s assets can be divided into two general categories – Strategic Buyers and Financial Buyers. Strategic Buyers include those that already participate in some way in the utility business. They include regulated utilities, independent energy companies, and investment companies with existing utility assets. For the most part, these would be entities that have experience with many of the components of JEA’s business, including: running a retail utility and managing a fleet of utility assets. Many of these Strategic Buyers will also have experience providing service in a territory that is overseen by a state level public utility regulator. Some of these potential buyers may already provide service that is subject to regulation by the FPSC. These Strategic Buyers would look to integrate JEA’s assets into their existing asset base, and likely derive cost synergies based on their existing operations. These buyers would view JEA as a very long term investment.

Financial Buyers would be those whose primary focus in acquiring JEA would be as a financial investment, perhaps one that might be sold after some period of time. The Financial Buyers would include: large investment funds, pension funds, private equity firms, infrastructure funds, etc. These buyers would likely keep JEA as a stand-alone entity, seeking to maximize earnings but not necessarily through synergies with their other investments. Minimum holding periods may be negotiated to prevent a buyer from selling the assets prior to the expiration of any conditions or protections negotiated by the City.

Other Considerations and Impacts on the City and Customers
Estimates of JEA’s market value, gross sale proceeds and the City’s net proceeds provide important input for any decision to pursue a new path for JEA and the City. However, the potential up-front net proceeds available to the City represent only one of many outcomes and impacts from a sale of JEA. There are several other far-reaching impacts in addition to the up-front price and net proceeds.

Customer Impacts – Rates and Service Levels
The discussion of future utility rates under an asset sale scenario is not simply a comparison of JEA’s current rates to potential future rates if JEA is sold. In order to assess the customer rate impact of a sale, it is necessary to develop long-term projections of customer rates under both (1) continued City ownership of JEA, and (2) if the assets are sold to a private, for-profit utility. A thorough analysis of the customer impact requires comprehensive rate projections under a sale and a non-sale scenario. The sale scenario requires analysis of (1) potential rate conditions that the City may decide to impose on potential buyers, and (2) on the rate structure once ratemaking governance transitions from the JEA Board to a FPSC regulatory environment. While it is impossible to predict the industry, economic, technological and demographic conditions that will prevail over the long run, an effort should made to develop the best possible pro forma projections for both a sale scenario and a non-sale scenario. Over the next five to ten years, the cash flow dynamics and capital needs of the electric system would suggest
that the FPSC rate regulatory structure would not allow a new owner much opportunity raise electric rates. In fact, it is possible that electric rates could be lower after a sale of the system. For the water and sewer system, if future capital improvements are required, the FPCS could approve rate increases needed by a new owner to recover their capital improvement. Based on the cash flow and capital needs of the water and sewer system, it is possible that higher rates may be needed in the foreseeable future. The projected incremental rate impact between JEA ownership and new ownership is likely to be the most important non-price consideration in the complex decision regarding JEA’s future.

**Local Employment and Economic Impacts**

In almost every acquisition of a major utility company, there is an expectation that the new combined enterprise will experience synergies and efficiencies that allow for cost reductions. There is no reason to expect that JEA’s case would be different. As mentioned, the City could place conditions on the buyer that they not reduce employment levels in and around the City for some period of time. Commitments from acquirers to maintain employment and/or economic presence in a community are common in utility acquisitions.

**Operational Efficiencies and Economic Benefits**

The City and JEA have partnered on many beneficial initiatives and projects in the past, and the City could continue to partner with a new owner subject to the terms and conditions of the sale. Listed below are select recent examples of the value of the partnership to the Jacksonville community:

- 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 acquired approximately 5,000 acres of land as buffers or adjacent to JEA facilities in parallel with the City’s Preservation Project as part of the Better Jacksonville Plan.
- The City and JEA partnered on the Water and Sewer Expansion Authority creation and dissolution from 2003 to 2011.
- JEA partnered with the City on the transition of Cecil Commerce Center (formerly Cecil Field) including planning for the transition.
- JEA and the City partnered on the LED streetlight conversion program which is an initiative to convert all streetlights City wide to LED fixtures.
- JEA’s operational efficiencies and advancements in the wastewater system provide nitrogen reduction credits to the City which are critical to meeting its reduction goals.
- 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’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 various City departments. 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 businesses and attract new business.
Many Florida utilities are supportive of economic development initiatives and partnerships; and offer rates programs that may be designed to encourage growth within certain industries. The extent to which an acquiring utility would participate in future economic development initiatives and partnerships can be among the conditions imposed upon a buyer.

**Potential Residual Costs and Liabilities**
The ownership and operation of a large utility carries a significant degree of business risk. The environmental risks and liabilities associated with both electric and water/sewer systems have received national attention in recent years. A purchaser would want a detailed environmental assessment and to conduct an environmental audit to fully understand the environmental risks associated with the acquisition. The City will also need to conduct an environmental risk assessment associated with any residual environmental liability that may not be transferred to a new owner.

**Renewables and Energy Policy**
JEA’s clean and renewable energy goals have been developed in response to JEA’s solicitation of and reaction to its customers’ desire for affordable pursuit of an environmentally responsible energy portfolio. If JEA is sold, these decisions are more likely to be determined by State and Federal legislation.

**Eligibility for Federal and State Assistance – FEMA Grants**
As a municipal government entity, the City and JEA are eligible for various forms of Federal and State assistance for events such as natural disasters, environmental mishaps and other potentially unexpected and costly occurrences. Governmental assistance of this nature may no longer be available to offset costs related to natural disaster recovery.

**Tax and Revenue Impacts**
Currently the City of Jacksonville has three primary funding sources from JEA into the General Fund:

- **JEA Contribution.** JEA’s 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 roughly $115 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 roughly $40 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 roughly $90 million in FY18.

**Property Taxes vs. City Contribution**
As a municipal utility, JEA does not pay property taxes on its land and assets; as an alternative JEA pays an annual contribution in lieu of taxes. Should a private entity take the place of JEA, the taxable assessed value of property in Duval County could increase by approximately 10% (the addition of ~$5bn net capital assets on the City’s ~$5bn taxable base). Based on current millage rates, this increase in assessed value will equate to approximately $100 million of additional
property taxes receipts, of which roughly $60 million would go the City of Jacksonville General Fund. Most of the remainder would go toward funding public schools.

**Franchise Fee**

JEA’s pays a 3% Franchise Fee. Many municipal utilities do not pay a franchise fee. It is more commonly assessed on investor-owned utilities, and in amounts up to 6%. The City could establish the new franchise fee at a level that is designed to preserve revenue to the City, and avoid having the franchise fee serve as a driver of higher rates.

**Public Service Taxes**

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

Prior to any asset sale, the City would need to conduct a comprehensive analysis of the tax and revenue changes arising from a new ownership structure – both on the City and on neighboring communities. It should be possible to “immunize” local government finance against adverse impacts from selling JEA if the proper conditions are imposed on potential buyers.

**Alternative Privatization Structures**

“Privatization” can encompass a variety of structures resulting in private sector involvement in the utility’s operation. Privatization structures could include:

- A sale of generation assets only. Under this option, JEA would sell 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 of the sale could be applied against JEA’s outstanding electric system debt to cushion any financial impact on JEA customers.


- Operations and Maintenance contract. Under this option, JEA would continue to exist as a legal entity with a reduced staff primarily responsible for contract management, financial reporting, and long-term strategic decision-making. 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 current, outsourced 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, NY (2011)
- Enterprise sale. Under this option, any one or combination of the existing JEA enterprises—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(s) 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 will be the primary focus for an analysis of JEA.

Examples of utility privatizations: City of Vero Beach, FL Electric System (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 and 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.

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

Example of utility concession: City of Allentown, PA Water & Wastewater (2013)

- Initial Public Offering. The City could choose to convert JEA to a corporation and recapitalize the business through an Initial Public Offering (“IPO”). This would have the effect of maintaining an independent investor-owned utility 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 in the market and retain a significant portion of ownership in the company. While under Florida law the City could not hold the remaining equity after an IPO, it could theoretically 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. Either option is likely to net less proceeds to the City from the privatization than a sale of the enterprise, although some benefits of local ownership could be preserved.

- 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 likely be downgraded, reflecting the increased debt position. This leverage could be structured to allow for stable rates over the near term 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 JEA.
The Sale Process
Utility asset sale processes generally proceed through five phases:

Phase 1 – Evaluation and Commitment to the Process: If a sale process is to move forward, it requires the preliminary evaluation contained in this Report in order to develop consensus and commitment for the next steps. That does not mean a commitment to sell; but rather to provide the comfort and guidance to potential buyers that if they undertake considerable due diligence, commit to spend billions of dollars, and achieve the City’s economic objectives, that their efforts likely will not be in vain. This commitment is essential to generating the greatest level of interest among buyers, and will be important to maximizing value.

Phase 2 – Preparing for the Sale: Engage advisors, prepare sale process, resolve legal, regulatory, and other issues prior to proceeding. This phase will include a 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. Develop documentation around the utilities’ operation, legal issues, financial disclosures, and other materials.

Phase 3 – Indications of Interest: During this phase, the seller receives reactions and indications 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 the buyer’s/bidder’s interest, and their financial and execution capabilities. Following this phase, the seller and its advisor will narrow down the acquirers to participate in the second phase of the bid process.

Phase 4 – Due diligence and final bids: 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(s) and the acquisition contract is negotiated. It is at the end of this stage that the City would deliver the final approval for a sale.

Phase 5 – Regulatory approvals: Completion of a process can be lengthy (in excess of a year). Approvals will be required from the Federal Energy Regulatory Commission, North American Electric Reliability Corporation, the FPSC, and other regulatory agencies.

Phases #2 through #4 could take roughly 5-9 months. Phases #1 and #5 are more difficult to predict, and could add more than six months to the front end of the process, and possibly a year for the final approval stage.

Considerations and Challenges to Executing a Transaction
A privatization of JEA and its utility enterprises would likely represent the largest and most complex municipal privatization in the United States. Privatizations are complex undertakings and often take years to complete. Below is a discussion of several of the execution complexities that will likely be encountered under a privatization scenario. 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
JEAs must ensure continuity of operations through a potential change in ownership. This includes managing the workforce through change while maintaining focus on safety, service and reliability to the community.

Employees
Any acquisition, sale or privatization process will be challenging for employees. There will be uncertainty from the time a potential sale is initially made public until the final resolution of the process. This process can take well over a year, and employees will focus on the terms of the transaction (negotiated by the parties) that affect their future job security. Employees may pursue other employment options in search of more security. It may be difficult to fill positions during a sale process.

Regulatory
JEAs currently operates under a municipal utility regulatory and rate setting construct. If a privatization were to occur, the transition to the FPSC regulatory structure 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
JEAs entered into a 20-year power purchase agreement with the Municipal Electric 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 accommodations to allow the sale process to comply with the tax covenants contained in the contract. Possible solutions which have been identified will require substantial legal and economic due diligence.

Interlocal agreements
JEAs has active interlocal agreements with Nassau and St. Johns Counties that grant JEA the right to provide water and sewer 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.

Property issues
JEAs has thousands of property rights contracts, many of which contain complexities around ownership, transfer rights, and division of property rights should a privatization occur.

St. Johns River Power Park Shutdown
JEAs is in the process of dismantling and remediating the St Johns River Power Park site under the terms of an Asset Transfer and Contract Termination Agreement ("ATA") between JEA and Florida Power & Light Company. This work will remain ongoing through 2020.
Transaction Execution and Costs
A sale of all or a portion of JEA’s assets will represent one of the largest, most complex transactions ever attempted in the municipal utility market. JEA and the City will require experienced financial, legal and technical advisors that specialize in utility assets sales. Obtaining the best advice is essential to maximizing value for the City and for ratepayers. The complex, protracted nature of this assignment will lead to professional fees that are much higher than for typical municipal financing assignments undertaken by JEA or the City. These fees often become the subject of much attention – even though expert advice is essential to the sale process and can generate value to the City that is well in excess of these fees.

The items discussed above, and others, will require resolution prior to the execution of an asset sale. Some of these items are likely to be subject to considerable public debate. It will be important to raise the issues, and resolve them to the extent possible, early in the process.

Summary
It is very likely that the sale of JEA, in whole or in part, can produce substantial up-front net proceeds to the City – even after all of JEA’s liabilities have been accounted for. Current market conditions can be expected to provide for a greater net value to the City from the sale of JEA than at any time in the past. The sale of JEA would be an enormously complex undertaking. It would have quantifiable impacts on future taxes and payments received by the City and other governmental jurisdictions. It would have economic impacts on JEA’s employees and on the City. Many of these impacts can be managed through conditions that the City can decide to impose on the sale process and on potential buyers. There would also be a number of qualitative differences between having a utility with a local presence and under local control, versus having a utility that is privately held. While local control and presence are appealing, there is also a fundamental question of whether it is prudent for the City to remain in the utility business. It is a business that is changing rapidly due to technology and market forces. Continued change could make the City’s ownership of JEA much less appealing in the future than it has been for the past several decades. It may be more prudent to leave this business to larger, more nimble companies that have the ability to absorb risk and uncertainty.

Jacksonville’s leaders will have to evaluate and weigh the quantifiable and qualitative impacts to make the best decision for JEA ratepayers and for the City. In the past, it could be expected that the sale of JEA would not produce enough proceeds to satisfy JEA’s liabilities and still leave sufficient net proceeds to compensate the City for future economic and qualitative differences under a new ownership structure. Because of recent changes to the utility market and to JEA, those old expectation are no longer valid. A more thorough, updated valuation of JEA, and perhaps an exploratory sale process could lead to a new answer to the old question of whether the City should sell JEA.