OFFICE OF THE COUNCIL AUDITOR
Suite 200, St. James Building

October 10, 2012 Special Report #722

Council Member Matt Schellenberg
Jacksonville City Council District 6
117 W. Duval Street
City Hall, Suite 425
Jacksonville, FL 32202

Dear Councilman Schellenberg,

In response to your request, my office has quantified the value of JEA's net assets and JEA's cash flows. We are providing this special written report in accordance with Ordinance Code Section 102.102. This report does not represent an audit or attestation conducted pursuant to Government Auditing Standards. As seen below, the value of JEA's net assets at September 30, 2011 was $1,808,559,000 per JEA's audited financial statements.

Value of JEA's Net Assets	Electric System	Water/Sewer System	District Energy System	Total JEA
Current Assets	$ 602,018,000	$ 141,161,000	$ 5,756,000	$ 748,935,000
Restricted Assets	776,123,000	309,037,000	3,956,000	1,089,116,000
Other Noncurrent Assets	85,393,000	18,531,000	256,000	104,180,000
Capital Assets (net of depreciation)	3,873,913,000	2,759,664,000	42,092,000	6,675,669,000
Deferred Outflows	153,340,000	23,418,000	-	176,758,000
Total Assets	$ 5,490,787,000	$ 3,251,811,000	$ 52,060,000	$ 8,794,658,000
Current Liabilities	$ 170,058,000	$ 22,476,000	$ 53,000	$ 192,587,000
Liabilities Payable from Restricted Assets	469,344,000	105,714,000	4,894,000	579,952,000
Other Noncurrent Liabilities	107,751,000	7,072,000	20,000	114,843,000
Long-term Debt	4,040,594,000	2,012,983,000	45,140,000	6,098,717,000
Total Liabilities	$ 4,787,747,000	$ 2,148,245,000	$ 50,107,000	$ 6,986,099,000
Net Assets as of September 30, 2011	$ 703,040,000	$ 1,103,566,000	$ 1,953,000	$ 1,808,559,000
(per JEA audited financial statements)				

Regarding the value of JEA's cash flows, we calculated the value from two different perspectives. First, what is the value of JEA's cash flows to the City of Jacksonville? Second, what would the value of JEA's cash flows be to an Investor Owned Utility (IOU)? These are two entirely different numbers. We calculated the net present value of JEA's projected contributions to the City general fund for the next 30 years. We also calculated the net present value of JEA's projected cash flows to an IOU for the next 30 years (assuming an IOU purchased JEA Electric and Water/Sewer Systems).

Each of these projections is based on various assumptions which we list below. While we believe that our assumptions are reasonable, they are educated guesses about the future which will likely differ from actual experience. We wish to emphasize that we are not experts in utility valuation and we did not engage or consult any independent experts in utility valuation to assist in calculating our estimates. In this process we consulted with the City of Jacksonville's Treasury Division, JEA's Treasury Services Department, and JEA's Financial Planning Budgets and Rates Department. This was a limited exercise which we believe provides useful estimates and information for discussion purposes.

<u>Value of JEA's Cash Flows to the City</u>

We estimate the net present value of JEA's cash flows over a 30 year period to the City to be within a range of $2,044,586,904 and $2,488,320,814 based on the following assumptions:

1. The appropriate interest rate for discounting the projected cash flows is 4.03% consisting of a risk free rate of 1.93% and a risk premium of 2.10%. The risk-free rate of return is the rate of return on an investment having no risk of default, equal to the real rate of return plus expected inflation. The risk premium is the difference between the required rate of return on an investment with risk and the rate of return on a risk-free investment, such as U.S. Treasury bonds.
2. The total JEA combined contribution for fiscal year 2010/11 was $101,687,538. The total JEA combined contribution (Electric & Water/Sewer) to the City will increase, at a minimum, $2.5 million each year through fiscal year 2015/16 in accordance with Ordinance 2007-838-E. After fiscal year 2015/16 we estimate the electric contribution and the water/sewer contribution to the City general fund will grow between 0.50% and 2.50% per year for the following 26 years.
3. The JEA District Energy System (DES-also known as Chilled Water Service) does not make a contribution to the City and DES revenue and expense are immaterial to this calculation.

<u>Value of JEA to an Investor Owned Utility</u>

We estimate the net present value of JEA's cash flows over a 30 year period to an IOU to be within a range of $1,039,870,216 and $1,215,011,384 based on the following assumptions:

1. The appropriate interest rate for discounting the projected cash flows from the Electric System is 10.50%, which is the current approved average return on equity (ROE) allowed by the Florida Public Service Commission (PSC) for the major investor owned electric utilities in Florida. The appropriate interest rate for discounting the projected cash flows from the Water/Sewer System is 9.75%, which is the current ROE for the largest investor owned water/sewer utility in Florida. The PSC sets rates at a level that is intended to allow each utility the opportunity to collect revenues equal to that utility's cost of providing service, including a reasonable rate of return on invested capital.
2. Electric (MWh) and Water/Sewer (CCF) sales will grow between 0.50% and 2.50% per year for the next 30 years. JEA Electric System average growth in sales for the past 10

years was 0.84%. Water/Sewer average growth in sales for the past 10 years was 3.56% although that growth was augmented through the JEA purchase of 36,612 United Water customers in 2001 and 7,000 Florida Water customers in 2004.

3. An IOU purchasing the Electric System and/or the Water/Sewer System would apply to the PSC for permission to increase rates as soon as possible in order to reach its desired ROE.
4. An IOU purchasing JEA would be required, as part of the purchase transaction, to pay the City for JEA's share of the General Employees' Pension Plan (GEPP) Unfunded Actuarial Accrued Liability (UAAL). We estimate JEA's share of the GEPP UAAL to be $272,941,713 based on JEA's percentage share of pensionable payrolls for the past three years (Fiscal Year 2008/09 – 2010/11). This amount of the sale proceeds would be paid into the GEPP trust fund and would not be available for other uses.
5. An IOU would be required to refund all $4,040,594,000 of JEA's tax-exempt electric system long term debt with taxable debt as part of the purchase transaction. Based on audited financials we estimate the IOU's average interest rate on outstanding electric debt would be 1.113% higher than JEA's average interest rate on outstanding electric debt. Additionally, the IOU would be required to refund all $45,140,000 of the DES outstanding Long Term Debt which is considered part of the Electric System for this analysis.
6. An IOU would be required to refund all $2,012,983,000 of JEA's tax-exempt Water/Sewer debt with taxable debt as part of a purchase transaction. Based on audited financials we estimate the IOU's average interest rate on outstanding debt for water/sewer would be 1.270% higher than JEA's average interest rate on outstanding debt for water/sewer.
7. The IOUs would save a combined total of $72,345,480 per year by laying off an estimated 747 JEA employees whose positions duplicate existing IOU employee positions. The savings represent the salaries and benefits for JEA upper management and support personnel who are not directly involved in operations, allocated 72% to electric and 28% to water/sewer.
8. The IOU would not pay a contribution to the City general fund, but would pay ad valorem taxes. Using the current millage rate and JEA's capital assets net of depreciation, we estimate that the IOU would pay as much as $62,138,141 per year to the City in ad valorem taxes. However, from discussions with Property Appraiser personnel, we understand that utility assessments are difficult to estimate and the amount of taxes received could be considerably less.
9. The electric IOU would pay corporate income taxes at an effective rate of 38% for combined state and federal income tax. The water/sewer IOU would pay corporate income taxes at an effective rate of 32.9% for combined state and federal income tax.
10. Electric fuel revenues equal fuel expense.
11. District Energy System revenue and expense are immaterial to this calculation. However, it is assumed that DES Capital Assets (net of depreciation) and Long Term Debt are part of the Electric System in the cash flows to an IOU.
12. The City's electric expense would increase approximately $2.8 million per year as the City's JEA customer discount would likely not be offered by an IOU.

Additional Considerations

As with any sale transaction, the value of JEA to an IOU assumes that a buyer exists that is willing and able to purchase the Electric System and/or the Water/Sewer System of JEA. Any discussion of selling all or part of JEA should consider the following:

1. The City would receive an infusion of cash from the sale that could be invested to provide a permanent revenue stream for the City general fund. For example, $1 billion would generate $24,200,000 per year assuming the proceeds were invested and earned 2.42% (current 20-year treasury bond yield) or $50,300,000 per year assuming the proceeds earned 5.03% (the average rate earned by the General Employees' Pension Plan during the past ten years). To determine the net annual financial benefit to the City general fund, this additional investment income must be netted with the additional ad valorem taxes which the City would receive as a result of the sale to the IOU (approximately $62 million for 2011 at the current millage rate), the loss of the JEA contribution to the City general fund ($101,687,538 for FY 10/11), and an increase in the City's electric expense of approximately $2.8 million per year as the City's JEA customer discount would likely not be offered by an IOU.
2. The City's current contribution from JEA has a guaranteed floor or minimum, whereas returns on the sale proceeds from JEA would be dependent on the market. The possibility also exists that a major market decline, such as the 2008 great recession, would result in the loss of principal, negating any positive outcome anticipated from the sale of the utilities.
3. The City would be removed from involvement or responsibility for public utilities if both the electric and water/sewer systems were sold.
4. JEA has assisted the City in numerous instances in the past. Examples include JEA's construction of significant utility infrastructure (approximately $53 million) at Cecil Commerce Center, the purchase of approximately $26 million of preservation land to complement the City's Preservation Project and the expense of approximately $28 million to construct Chilled Water plants serving Better Jacksonville Plan buildings; Courthouse Complex, Main Library, Arena and Ballpark. It is doubtful that an IOU based outside of Jacksonville would partner as closely with the City as JEA.
5. The sale of JEA to an IOU would result in the City losing over 700 jobs with salaries and benefits totaling more than $70 million annually.
6. The Duval County School Board would receive annual ad valorem taxes as a result of the sale to an IOU. Using the current millage rate and JEA's capital assets net of depreciation, we estimate that the IOU would pay as much as $46,767,848 per year to the School Board in ad valorem taxes. However, from discussions with Property Appraiser personnel, we understand that utility assessments are difficult to estimate and the amount of taxes received could be considerably less. To determine the net benefit to the School Board, the ad valorem taxes received must be netted against an increase in the School Board's electric expense of approximately $2 million per year as the School Board's JEA customer discount would likely not be offered by an IOU.

Conclusion

We estimate the value of JEA to the City to be a range between $2.0 and $2.5 billion taking into consideration the assumptions listed above. We estimate that the range in value of JEA could be $1.0 billion at a minimum and as high as $1.2 billion to an investor owned utility or utilities assuming that a willing and able buyer exists.

Sincerely,

Kirk A. Sherman, CPA
Council Auditor