

Analyzing the Potential Sale of JEA, Jacksonville's Municipally-Owned Public Utility

Proposed Scope of Work

Public Utility Research Center
Warrington College of Business
University of Florida

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Purpose

The Public Utility Research Center (PURC) will provide the Jessie Ball duPont Fund (Fund) with an academic-quality analysis of the potential sale of JEA, Jacksonville's municipally-owned public utility. JEA serves approximately 458,000 electric, 341,000 water and 264,000 sewer customers. There has been recent discussion about selling the utility, which raises a number of issues, such as:

- What would be the financial impacts on the city and on the JEA customers? What other impacts would there be?
- Should a sale be just the electric portion or all three areas of operation? If all three, should they be sold as a bundle or separately?
- What are the risks that JEA faces? How do these affect the future of the utility?
- If all or part of JEA is sold, what happens with the proceeds?
- How can city leaders best prepare themselves to address these and other issues?

To help answer these and other questions, PURC will assemble a team of utility and regulatory experts with extensive experience in academic research, the economics and governance of municipal utilities, and the regulation of private utilities. Because the research will be an academic project and not a consulting project, the PURC team (hereafter, Project Team) will have complete discretion over the content of the research report and the funding will be in the form of a grant to the university.

Following are descriptions of the study methodology, deliverables, Project Team, PURC, and the proposed budget.

Study Methodology

The Project Team will use a wide variety of information sources and analytical techniques to address the broad issues raised by this project. The data and tools necessary to address the individual components of the study are detailed below.

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

The value of a utility to its owners has two aspects. The first is the value of the physical assets of the utility and the second is the ability to utilize those assets to generate value for the owners and customers. The physical value of the assets can be measured as either the original cost, the cost incurred to purchase the assets at the time they were installed, or the replacement cost, the costs necessary to replace the assets today. The asset value may also incorporate depreciation, an accounting construct reflecting the fact that physical assets wear out and become less effective over time. The choice of valuation method depends upon the reason for identifying the value. The original cost identifies the cash value that the owners provided to purchase the assets, less any cost recovery. It is often used in setting utility rates where a primary objective is providing the owners an opportunity for a return on and a return of their original investments. The replacement cost identifies what it would cost in current dollars to replace the utility plant as is. This approach is used to reflect the effects of inflation on the capital that owners provided for the utility plant.

The second aspect of the value of a utility is the going concern value of the assets. Going concern reflects the ability of the physical assets to produce value for the owners over time. Going concern is typically measured as the discounted flow of the normalized earnings of a company, rather than just the earnings for a particular year. Section 73.0715, Florida Statutes, requires that going concern value be included in the valuation of any private utility in the case of a sale to a municipality.

This study will express the value of JEA in both ways as the city may wish to look at the potential sale from different vantage points.

The Project Team will rely primarily on the audited financial statements of JEA and other public filings. Investor-owned utilities and rural cooperatives are required to file an Annual Report (known as a Form 1) with the Federal Energy Regulatory Commission. This report includes a separate accounting of all generation, transmission, and distribution assets of an electric utility, as well as detail on administrative and operations expenses, based on an established Chart of Accounts, and would form the basis of a study such as this if the subject were an investor-owned or cooperative utility. However, municipal utilities such as JEA are exempt from these Federal filing requirements. While this data could possibly be obtained from JEA through a data request, JEA is under no obligation to comply with such a request. As a result, the audited financial statements of JEA consolidated and any detail for the Electric Enterprise, Water and Sewer Enterprise, and District Energy System will be the primary data source for this question. JEA does not separately account for any other services that they provide. Without such information it is impossible to separately value them with much legitimacy.

All utilities, including JEA, are also required to file the Annual Electric Power Industry Report with the Department of Energy's Energy Information Administration (known as the Form EIA-861). This report

encompasses operating data for the utility including kWh sales and revenues by customer class, rudimentary reliability metrics, and information on renewable energy and energy efficiency programs. This database will be utilized as a source for electric utility operational data.

A further consideration when contemplating the value of JEA is the peculiarity of the regulated utility sector. Because the people of Jacksonville are both the owners and customers of JEA, they could be impacted twice by any purchase price for the utility. Regardless of the price paid, any private entity purchasing JEA would probably seek utility rates at the Florida Public Service Commission that allow it to recover that purchase cost from the customers currently served by JEA. Based on this insight, the Project Team will distinguish between the value of JEA to its owners and the value of JEA to its customers.

One aspect of the comparison of Jacksonville citizens as owners versus customers is that the relative rate levels for residential and business customers may change. If a private entity purchases JEA's electric operations, the Florida Public Service Commission will set these rates. The Project Team will provide information on how the regulatory has set these prices for investor owned utilities.

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

The Project Team will conduct a benchmarking analysis of Florida investor-owned, cooperative and municipal utilities. The metrics used for the analysis will be operating and maintenance expenses per kWh or kgal delivered and operating and maintenance expenses per customer, for both the water and electric utility. As explained in Topic 1, municipal utilities are exempt from the Federal filing requirements where such expenses would be detailed. However, JEA's audited financial statements do distinguish between fuel, purchased power, and operating expenditures, and this distinction will be utilized for this benchmarking study.

Benchmarking is defined as a means of quantifying the relative performance of companies or divisions (such as regional distribution companies). Summary performance indicators, such as output per worker, are often used to identify trends, determine baselines, and identify reasonable targets—based on a sample of comparable firms. Performance scores can also be based on more comprehensive production or cost models, using econometric or data envelopment analysis. Studies vary in levels of sophistication and ease of interpretation, but all can provide important information regarding the relative performance of firms who face comparable production conditions.¹

Florida municipal utilities that do not file distinct financial statements for their electric and water utilities, such as those where the utility is a department of the city, will not be utilized in this analysis.

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

The Project Team will characterize JEA according to its size, operations, lines of business, and nature of ownership and compare it to comparable utilities. This will be done with various data sources to address the relative position of JEA for these metrics. The standing of its size can be determined through the EIA-

¹ For further information, see PURC's Body of Knowledge on Infrastructure Regulation <http://regulationbodyofknowledge.org/glossary/b/benchmarking/>.

861 database. Operational effectiveness will be assessed through the benchmarking study in Topic 2. Relative standing, in lines of business, and nature of ownership will be assessed through a survey of all municipal utilities in Florida. To the extent that such a survey exists for the roughly 2,000 municipal utilities outside of Florida, that survey will be incorporated into this assessment. Relative standing in financial health will be assessed through JEA's performance in various liquidity, asset utilization, and profitability ratios, benchmarked against other utilities in Florida. For customer service, data on outage frequency and outage duration is available through the Form EIA-861, and JEA's relative standing in Florida will be benchmarked through these metrics.

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

Regulated industries such as utilities, through the regulatory compact, can be seen as less susceptible to economic disruptions than non-regulated entities, but that does not mean that they are immune. Continued penetration of distributed generation (particularly rooftop photovoltaic systems) and an increased role of energy storage have the potential to disrupt the legacy centralized generation market for electric utilities. The Project Team will conduct literature reviews and gather case studies to assess the threats and opportunities to JEA as a result of these technologies and extract lessons and potential impacts on JEA's finances.

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

The Project Team will conduct a literature review of academic and trade studies that have assessed the advantages and disadvantages of public sector and private sector ownership of utilities. These studies tend to focus on whether a particular ownership model is more effective of providing a particular type of service. For example, one member of the Project Team has conducted a study of whether utilities change their behavior in wholesale markets when those markets become liberalized. He found that investor-owned utilities tend to participate more in open wholesale markets and that municipal utilities and cooperatives tend to withdraw from these markets and participate less, and that any benefits derived from open wholesale markets may not be distributed uniformly across the electricity sector. Other members of the team have conducted research on how privatization affects efficiency, investment, and innovation.

The services addressed in this analysis will include, but not be limited to, rates, costs, reliability of service, efficiency, investments innovation, and access to service. Once the literature review is complete, the Project Team will extract relevant lessons for JEA from the findings.

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

JEA is impacted by two principal market-based risks: fuel prices and interest rates. The Project Team will conduct simulations of fuel prices and interest rates, based on historical volatility, to construct probability distributions of fuel costs and interest expenses and assess the impact that this uncertainty has on JEA's ability to meet its obligations.

The Project Team will also conduct an assessment of the impact that a change in ownership would have on JEA's ability to mitigate market risk. For example, JEA currently maintains the Fuel Stabilization Fund, an internal fund used to insulate customers from the impact of short term variability in fuel costs. While this financial tool is utilized by many municipal and cooperative utilities, this mechanism is currently not permitted for investor-owned utilities regulated by the Florida Public Service Commission. Further, the Florida Public Service Commission has been scrutinizing the effectiveness of fuel hedging programs for investor-owned electric utilities and has suspended the practice. If JEA were to be purchased by a private entity, it would also be impacted by this suspension.

In addition, the value of JEA is potentially impacted by the value of electric utilities in the market, so the Project Team will conduct an analysis of the volatility of the value of electric and water utilities in the United States, relative to the market rates of risk. The measure is commonly referred to as the beta of an industry.

The Project Team will also assess the risk to JEA of changes in the utility sector described in Topic 7. In particular, there is demand risk from the growth of what is called distributed energy resources. This is essentially the growth of customer solar, community solar, and battery technologies that affect the demand for energy that JEA might sell, and JEA's planning for its electricity grid.

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

This analysis is an important component of the value of JEA and will be included in Topic 1, the valuation analysis. The details will be provided there.

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

This analysis is an important component of the value of JEA and will be included in Topic 1, the valuation analysis. The details will be provided there.

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

Joint ownership permits separate lines of business to share resources without financial transactions and formal contracts. It is unclear from the information PURC has reviewed whether JEA has taken advantage of this opportunity, or if it operated water, sewer and electricity as separate businesses with payments for services between operating entities, such as the energy business's use of water and sewer services. The revenue and expense consequences for JEA's water and sewer operations becoming a utility provider to and a customer of the spun-off electricity business will be estimated and incorporated into a financial projection.

Perhaps of even greater importance is the question of separation costs, or the costs necessary to separate the systems when a utility changes. Under Section 73.0715, Florida Statutes, the municipal entity is responsible for separation costs in the event of the municipalization of an investor-owned utility. In a privatization, the responsibility for separation costs is a negotiable item.

The separation costs would include the costs necessary to separate any physical systems and to relocate, for example, water utility assets that might be located on electric utility property. These costs would also include the separation of any shared computer systems, such as billing systems or automated data transfer systems.

The Project Team will identify potential sources for separation costs and discuss methods by which these costs might be identified. The Project Team will also gather any information regarding separation costs in its survey of utility privatizations in item #12. The quantification of these separation costs is beyond the scope of this research.

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

The Project Team will research annual reports and other public sources for services provided by JEA that may be outside its scope as an electric, water and sewer, or district energy provider. The Project Team will then assess any limits, imposed by Florida Statute or Florida Public Service Commission rule, on these services if the ownership of JEA changes.

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

The Project Team will conduct a review of electric and water utility privatizations in the United States to compile the information necessary to address this question. Once the review is complete, the Project team will extract relevant lessons for process streamlining and the reduction of transactions costs.

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

In its review for item #12, the Project Team will gather any information regarding the disposition of any proceeds from sales of other municipal utilities, as well as any conditions of the sale that imposed limits on the use of the proceeds. The Project Team will then extract any relevant lessons or policies that could apply to JEA.

Project Team

Dr. Ted Kury, PURC director of energy studies, will lead the Project Team. At PURC he is responsible for promoting research and outreach activities in energy regulation and policy. He develops research strategies that inform the academic community and practitioners on emerging issues and best practices and serves as an expert resource for regulatory professionals, policymakers, and service providers in Florida and around the world.

Dr. Kury serves on the steering committee of UF's Florida Institute for Sustainable Energy. He also collaborates with faculty at other universities around the state as part of the Florida Energy Systems Consortium, a consortium created by the governor to leverage the expertise of Florida's research community. In addition, Dr. Kury assists in the coordination of Florida's hurricane hardening efforts.

Previously, Dr. Kury was a senior structuring and pricing analyst at The Energy Authority in Jacksonville, Florida where he developed proprietary models relating to the management of system-wide cash flows at risk, including the quantification of portfolio risk related to both physical utility and financial assets. He also built custom software packages to quantify cross commodity risk, valuation, and optimization of natural gas storage with dynamic programming. He was also a senior economist at SVBK Consulting Group in Orlando, Florida. Some of his duties there included participating in legal proceedings relating to the deregulation of electric markets and helping municipal electric, natural gas, and water/wastewater utilities develop retail rates. He has delivered numerous presentations at research conferences and has served as an expert witness before the Federal Energy Regulatory Commission and the Florida Public Service Commission.

Dr. Kury's work has been featured on CNN, Fox News, NPR, and the Wall Street Journal. He has published papers on the efficacy of energy regulatory policy and the quantification of risk, is a referee for several journals, and a member of the United States Association for Energy Economics. Dr. Kury received his Ph.D. in Economics from the University of Florida.

Attachment 1 highlights aspects of Dr. Kury's experience that are directly relevant to this project.

David Richardson will serve as the Project Team's expert on water, sewer and municipal operations expert. Mr. Richardson is currently serving as Senior Fellow for PURC. Formerly he was serving as the Interim Chief Financial Officer for Gainesville Regional Utilities, where he was responsible for the overall financial management and internal control structure. He has worked for GRU since 1986 in various positions, including Senior Engineer (1986 – 2001), System Planning Director (2002 – 2004) and Assistant General Manager (2005 – 2013). Mr. Richardson holds a Bachelor of Science degree in Environmental Engineering from the University of Florida and a Master of Science degree in Engineering Administration from the University of Central Florida.

Cindy Miller will serve as a regulatory and legal expert for the Project Team. Ms. Miller is a private consultant specializing in energy, telecommunications, and Florida administrative law. In 2017, she was elected to serve as Vice President of the Southern Chapter (covering 13 states) of the Energy Bar Association. She continues also as co-chair of the Florida Bar Public Utilities Law Committee. She served as a Senior Attorney (intergovernmental counsel) at the Florida Public Service Commission for more than 20 years. She was responsible for monitoring legislation, Federal energy and telecommunications actions and preparing comments and Court documents for the Commission's consideration. In the energy arena,

these included comments to the Federal Energy Regulatory Commission on reliability and public policy matters related to energy delivery and state jurisdiction. She made presentations at more than 200 Internal Affairs. She was the lead attorney on dozens of complex rulemakings and worked on public records/ethics issues. Prior to working at the Florida Commission, she was Inspector General at the Florida Department of Management Services. She also worked at the Greenberg Traurig law firm (previously Roberts, Baggett, LaFace and Richard) in legislative activities. She previously lived in Washington, D.C., and worked as a Presidential Management Intern and management analyst at the U.S. Office of Management and Budget. She has been admitted to practice in the Florida Supreme Court, the D.C. Circuit Court of Appeals, and the Fifth Circuit Court of Appeals. Ms. Miller received her J.D. from the University of Florida and a MPA from Florida State University.

Dr. Mark Jamison will serve as a senior advisor for the Project Team. Dr. Jamison is the director and Gunter Professor of PURC. He provides international training and research on business and government policy, focusing primarily on utilities and network industries. He directs the PURC/World Bank International Training Program on Utility Regulation and Strategy. Dr. Jamison's current research topics include leadership and institutional development in regulation, competition in telecommunications, and regulation for next generation networks. He has conducted education programs in numerous countries in Asia, Africa, Europe, the Caribbean, and North, South, and Central America. Dr. Jamison is also a research associate with the UF Center for Public Policy Research. He blogs for the American Enterprise Institute and for The World Bank. Dr. Jamison served on the US Presidential Transition Team in 2016-2017, focusing on the Federal Communications Commission. He is the former associate director of Business and Economic Studies for the UF Center for International Business Education and Research and has served as special academic advisor to the chair of the Florida Governor's Internet task force and as president of the Transportation and Public Utilities Group. Previously, Dr. Jamison was manager of regulatory policy at Sprint, head of research for the Iowa Utilities Board, and communications economist for the Kansas Corporation Commission. He has served as chairperson of the National Association of Regulatory Utility Commissioners (NARUC) Staff Subcommittee on Communications, chairperson of the State Staff for the Federal/State Joint Conference on Open Network Architecture, and member of the State Staff for the Federal/State Joint Board on Separations. Dr. Jamison was also on the faculty of the NARUC Annual Regulatory Studies Program and other education programs. Dr. Jamison received his Ph.D. in economics from the University of Florida.

Deliverables and Schedule

PURC anticipates that the project will take about 6 months to complete. Following is the proposed schedule of deliverables. The work will begin with an inception report. Feedback from the Fund should be provided within a week and a final inception report approved within one month of the awarding of the grant. There will be three monthly reports so that the Fund is aware of the progress and initial findings. Feedback should be provided within a week, perhaps including conference calls if agreed upon by the Fund and the Project Team. A draft final report will be provided within 4 months.

Deliverable Item	Date Delivered
Draft inception Report and work plan	2 weeks from award
First monthly progress report	End of first full month after final inception report
Second monthly progress report	End of second full month after final inception report
Third monthly progress report	End of third full month after final inception report
First draft report	3 months after final inception report
Last draft report	4 months after final inception report
Final report	5 months after final inception report

About PURC

The Public Utility Research Center at the University of Florida is an internationally recognized academic center dedicated to research and to providing training in utility regulation and strategy, as well as the development of leadership in infrastructure policy.

Founded in 1972, the Public Utility Research Center is located in the Warrington College of Business at the University of Florida. We strive to enhance the understanding of issues confronting public utilities and regulatory agencies through conferences, seminars and training programs; through research covering the energy, telecommunications, and water sectors, and by preparing students for careers in infrastructure industries.

Our programs teach the principles and practices that support effective utility policy, regulation, management, and leadership. With these tools, we help government and industry officials develop efficient utility infrastructure to better meet the needs of their customers.

Our extensive network of utility and regulatory experts around the world works with us to connect theory and practice in ways that extend our understanding of these sectors; we deliver training programs in Florida, the nation, and around the world.

PURC has provided sponsored research on energy and water topics for the State of Florida, Florida utilities, and the University of Florida, as well as conducted numerous unfunded studies of energy issues as part of PURC's academic mission. Attachment 2 contains a list of recent research papers relevant to energy and water.

Attachment 1. Directly Relevant Projects for Dr. Ted Kury

Garland Power and Light Valuation and Risk Assessment

The Project Team assisted the City of Garland as the state of Texas restructured the electricity sector. Garland Power and Light, the municipal utility that serves Garland, Texas, had to choose whether to remain a municipal utility, privatize the entire utility, privatize its generation assets, or transition to a competitive power supplier. The project included the valuation of the utility under the various scenarios as well as an assessment of the relative risk of each structure.

Competitive Wholesale Power Procurement by Municipal Utilities in the United States

The Project Team represented the municipal electric utilities in Greenwood and Seneca, South Carolina in the first competitive wholesale power procurement in the United States following the restructuring of the US electricity sector. The project included the valuation of the utilities, as a whole and as a transmission and distribution entity, feasibility of seeking power supply in the wholesale market, initiating the tendering process, evaluating offers and choosing the winning bidder. The project also involved support during the legal proceedings at the South Carolina Public Service Commission and the Federal Energy Regulatory Commission.

Imperial Irrigation District Risk Management

The Project Team led the analytical efforts in evaluating the effectiveness of the fuel hedging program for the Imperial Irrigation District in California. The District had entered into a number of hedging transactions but became concerned over the suitability of those transactions to mitigate its risk. The Project Team evaluated the factors that contributed to the District's cash at risk and tested the effects that the current hedging portfolio had on that risk. The analysis determined that the current portfolio was not effective at reducing risk and suggested the manner in which the portfolio could be adjusted to better protect the customers of the utility.

Attachment 2. Recent Papers on Energy and Water Issues

Berg, Sanford V. 2017. "Three Lessons for Improving Infrastructure Performance" University of Florida, Warrington College of Business, PURC Working Paper.

Berg, Sanford V. 2016. "Seven Elements Affecting Governance and Performance in the Water Sector" University of Florida, Warrington College of Business Administration, PURC Working Paper.

Berg, Sanford V., and Michelle Phillips. 2017. "Data Availability as a Key Tool for Regulating Government-Owned Water Utilities" University of Florida, Warrington College of Business Administration, PURC Working Paper.

Berg, Sanford V., and Michelle Phillips. 2016. "Data Transparency as a Key Tool for Regulating Government-Owned Water Utilities" University of Florida, Warrington College of Business Administration, PURC Working Paper.

Boampong, Richard. 2016. "Residential Energy Consumers Response to Energy Efficiency Rebates, Incentives, and Prices" University of Florida, Warrington College of Business Administration, PURC Working Paper.

Boampong, Richard, and Michelle Phillips. 2016. "Renewable energy incentives in Kenya: Feed-in-tariffs and Rural Expansion" University of Florida, Warrington College of Business Administration, PURC Working Paper.

Boampong, Richard, Colin A. Knapp, and Michelle Phillips. 2016. "The Effect of Renewable Portfolio Standards on State-Level Employment: An Ex Post Analysis" University of Florida, Warrington College of Business Administration, PURC Working Paper.

Brown, David P., and David E. M. Sappington. 2016. "Designing Compensation for Distributed Solar Generation: Is Net Metering Ever Optimal?" University of Florida, Warrington College of Business Administration, PURC Working Paper.

Brown, David P., and David E. M. Sappington. 2016. "On the optimal design of demand response policies" *Journal of Regulatory Economics*, 49(3):265-291.

Brown, David P., and David E. M. Sappington. 2016. "On the Role of Maximum Demand Charges in the Presence of Distributed Generation Resources" University of Florida, Department of Economics, PURC Working Paper.

Castaneda, Araceli, and Mark A. Jamison. 2017. "Stakeholders and Power Relations in Regulation" University of Florida, Warrington College of Business, PURC Working Paper.

Castaneda, Araceli, Mark A. Jamison, and Michelle Phillips. 2015. "The Essential DNA of Electricity Regulation" University of Florida, Warrington College of Business, PURC Working Paper.

Carvalho, Pedro, Rui Cunha Marques, and Sanford V. Berg. Forthcoming. "A Meta-Regression Analysis of Benchmarking Studies on Water Utilities Market Structure" *Utilities Policy*.

- Fikru, Mahelet, and Michelle Phillips.** 2016. "Consolidation of Municipality-owned Water Suppliers in Japan" *Water Science and Technology*, 695-702.
- Hauge, Janice A., and Mark A. Jamison.** 2016. "Identifying Market Power in Times of Constant Change" University of Florida, Warrington College of Business Administration, PURC Working Paper.
- Holt, Lynne, and Mary Galligan.** 2017. "State Public Utility Commissions' Role in Cybersecurity and Physical Security Issues: Trade-Offs and Challenges" University of Florida, Warrington College of Business Administration, PURC Working Paper.
- Holt, Lynne, and Mary Galligan.** 2017. "Utility-Led Community Solar – A “Win-Win” for Customers & Electric Utilities?" *The Electricity Journal*, 28(4):66-77.
- Holt, Lynne, and Mary Galligan.** 2015. "Florida's Proposed Constitutional Amendment on Local Solar Electricity Supply" *The Electricity Journal*, 28(4):66-77.
- Holt, Lynne.** 2015. "Political Implications of the Clean Power Plan for the 2016 Presidential Election." University of Florida, Warrington College of Business, PURC Working Paper.
- Holt, Lynne.** 2016. "U.S. Electric Utility Creditworthiness--Why the Regulatory Framework Matters" University of Florida, Warrington College of Business Administration, PURC Working Paper.
- Jamison, Mark A.** 2015. "The Economic and Political Realities of Regulation: Lessons for the Future." *Energy Regulation Quarterly*, 3:17-20.
- Jamison, Mark A.** 2016. "Emerging Institutional Weaknesses in US Regulation?" University of Florida, Warrington College of Business Administration, PURC Working Paper.
- Jamison, Mark A., and Araceli Castaneda.** 2014. "Execution and Leadership: Fulfilling Conflicting Responsibilities in Utility Regulation." *The Electricity Journal*, 27(3):67-76.
- Jamison, Mark A., and Janice A. Hauge.** 2016. "Adding Dimension to Merger Analysis" *Journal for Competition Law and Economics*, 12(1):99-112.
- Li, Fan, and Michelle Phillips.** Forthcoming. "The Influence of Regulation and the Operational Environment on Chinese Urban Water Utilities." *Water Resources Management*.
- Sappington, David E. M., and Dennis L. Weisman.** 2012. "Regulating regulators in transitionally competitive markets." *Journal of Regulatory Economics*, 41(1):19-40.
- Sappington, David E. M., and Dennis L. Weisman.** 2016. "The disparate adoption of price cap regulation in the U.S. telecommunications and electricity sectors" *Journal of Regulatory Economics*, 49(2):250-264.
- Sappington, David E. M., and Dennis L. Weisman.** 2016. "The price cap regulation paradox in the electricity sector" *The Electricity Journal*, 29(3):1-5.

Vandaele, Nicole, and Wendell Porter. 2015. "Renewable Energy in Developing and Developed Nations: Outlooks to 2040" University of Florida, Department of Economics, PURC Working Paper.