Beauregard Electric Cooperative, Inc. ex parte Request for Extension of Formula Rate Plan and Modifications thereto

RFP 15-16 Docket No. S-33908

Attn.: Kathleen Richardson
Louisiana Public Service Commission, Baton Rouge, LA

UtiliWorks™
Strategic Utility Consulting

UtiliWorks Consulting, LLC.
2351 Energy Drive Suite 1010
Baton Rouge, LA 70808
P 225.766.4188
F 225.612.6404
www.utiliworks.com

Table of Contents

Tab A - COVER LETTER **3**

Tab B - UTILIWORKS CONSULTING OVERVIEW **4**

Tab C - QUALIFICATIONS AND EXPERIENCE **5**

1. Profile 5
2. Client Matrix 6
3. Project References 7

Tab D - PROPOSED PROJECT TEAM **9**

1. Organization Chart 9
2. Biographies of Team Members 9

Tab E - UTILIWORKS CONSULTING BACKGROUND **11**

1. UtiliWorks Consulting Description 11
2. Work Plan 12
3. Proposed Schedule 12

Tab F - COST PROPOSAL **14**

1. UtiliWorks Consulting Hourly Rates 14

Tab G - APPENDICES **15**

1. Resumes 15
2. Industry Recognition 29
   A. Awards 29
   B. Speaking Engagements 30

*"UtiliWorks is a perfect fit for a successful project" – **Clint Whitney, City of Richland WA***

© 2016 UtiliWorks Consulting, LLC

Tab A - **COVER LETTER**

To: Ms. Kathleen Richardson
Louisiana Public Service Commission
Office of the General Counsel
602 North Fifth Street (Galvez Building) (70802)
Baton Rouge, Louisiana 70821-9154

Date: January 18, 2016
Re: Proposal for Beauregard Electric Cooperative, Inc. Request for Extension of Formula Rate Plan & Modification thereto

Dear Ms. Richardson,

We appreciate the opportunity to present this proposal for Louisiana Public Service Commission (LPSC). UtiliWorks Consulting, a local consulting firm located in Baton Rouge, offers professional services to assist clients in the assessment, design, procurement and implementation of smart solutions for electric, water and gas utilities. This is the exclusive focus of our company.

Working in conjunction with LPSC and Beauregard Electric Cooperative (BEC) personnel, we will assist LPSC in analyzing BEC's Formula Rate Plan (FRP) extension request and determine if it will result in just and reasonable rates for BEC's customers.

UtiliWorks Consulting team has the experience in working with and evaluating multiple electric co-ops, Louisiana state utilities, developing rate plans, and being an expert witness providing testimonies for utility commissions. The following proposal outlines UtiliWorks' project approach and scope of services for conducting a FRP application review. Based on our past knowledge, we believe that this approach will be a useful and efficient method for achieving the objectives of the study and satisfy the LPSC need to have BEC's application reviewed along with the activities requested by LPSC, including the four proposed annual review filings.

In summary, we believe the work requested by LPSC regarding BEC's FRP application review is ideal for our firm, and that our team would connect with your team in a cost-effective way that will yield great results in BEC's final FRP. We look forward to additional opportunities to demonstrate our interest and capabilities for the project via conference call, onsite interviews, or additional requests for information.

Thank you for your consideration.

Respectfully submitted,

Dale Pennington
Managing Director
dpennington@utiliworks.com

2351 Energy Drive, Suite 1010
Baton Rouge, LA 70808
(225) 766-4188

© 2016 UtiliWorks Consulting, LLC

Tab B - **UTILIWORKS CONSULTING OVERVIEW**

UtiliWorks Consulting, LLC ("UWC", “UtiliWorks”, or “Consultant”) was founded in 2005, with the singular goal of supporting utilities with the tools and insight necessary to provide the highest quality service to their customers. Our team and various contractors are utility professionals passionate about finding innovating solutions to the problems facing today's providers of electricity, gas, and water. Our thorough and data-driven approach to the assessment of utilities' resources has distinguished our firm from competitors time and time again. We intend to bring the same drive and focus for Louisiana Public Service Commission (LPSC).

UtiliWorks has extensive experience serving utilities in various capacities. UtiliWorks assists organizations in technology implementations, rate studies, business case analysis, public awareness campaigns, business process re-engineering, RFP development and procurement, as well as many other consulting services. UtiliWorks regularly advises its clients on capital planning activities, including installation of field equipment, communication systems, IT systems and other capital projects. With respect to the requirements in the RFP put forth by LPSC, UtiliWorks believes it is well positioned to support LPSC’s needs in reviewing Beauregard Electric Cooperative (BEC)’s Formula Rate Plan (FRP) extension request. UtiliWorks has performed multiple utility rate studies, served as an expert witness, and managed capital-intensive projects. This wide spectrum of experience has equipped UtiliWorks with keen insight into the needs of LPSC and BEC, and will ensure that we deliver an optimal product at the end of this engagement.

Being summoned to testify before a state commission or court of law opens a utility up to a tremendous level of scrutiny. The breadth and scope of questioning can be wider than the knowledge base of the average utility staffer or director. UtiliWorks’ team of subject matter experts is fully-versed in the types of inquiries and rate cases undertaken by utilities. Whether LPSC needs an expert witness, drafting written testimony, strategizing for hearings or settlement discussions, or responding to requests for information from opposing parties, UtiliWorks is well-suited and ready to meet your needs.

UtiliWorks will work closely with LPSC’s in-house legal, auditing and economics staff to conduct the review of BEC’s filing. Our goal is for LPSC to view UtiliWorks as an extension of City staff, and to feel comfortable that our utility expertise is serving the best interests of LPSC and BEC. At the end of our engagement, we pledge to have delivered high quality service to all parties.

© 2016 UtiliWorks Consulting, LLC

Tab C - QUALIFICATIONS AND EXPERIENCE

1. Profile

Contact Information	UtiliWorks Consulting, LLC 2351 Energy Drive STE 1010 Baton Rouge, LA 70808 Website: www.UtiliWorks.com Contact: Dale Pennington, Managing Director Phone: 225-766-4188 Fax: 225-612-6404 Email: dpennington@UtiliWorks.com
Business Focus	· Professional Services Firm · AMI/MDM applications (smart metering); Smart Grid Design · Related business process and work management systems · Water, Gas and Electric Utilities
Company Information	Founded: 2005 Limited Liability Company Ownership Status: Independent FEIN:20-5167904 DUNS: 825164713
Services	· Assess, Design, Procure, Develop, Install, Support · Business Process Consulting and Technology Advisors · Turnkey Smart Metering Solution Development · Work Flow, Change Management, Project Management · Radio Frequency, Copper, Fiber, Data and Networking
Company Goal	To provide accurate and reliable delivery of meter and operational data that will help local governments lower costs and improve services to their community
Location	· Corporate Office in Baton Rouge, LA · Associate offices in CA, CO, GA, LA, NC, NY, SC, TN
Banking	Chase Bank 451 Florida St., 7th floor Suite 726, Baton Rouge LA 70801 Attn: Michelle Boudreaux Phone: 225-332-7718
Insurance and Bonding	Juban Insurance Group 4319 Bluebonnet Boulevard, Baton Rouge LA 70809 Attn: Dave Peek Phone: 225-291-0405
Legal	Graves-Carley, LLP: 2137 Quail Run # B, Baton Rouge, LA 70808 Attn: Allen Graves Phone: (225) 757-7676 Fax: (225) 757-1771
Financial	Utiliworks Consulting, LLC operates without loans, is financially sound and profitable, and does not have or ever had any legal action against it. Further information can be made available upon a specific request.

© 2016 UtiliWorks Consulting, LLC

2. **Client Matrix**

UtiliWorks Project List	State	Meters	AMI/AMR	Meter Data Management	Strategic Planning	Business Case / Cost Benefit Analysis	Technology Procurement	Technology Review	Vendor Contract Negotiations	Business Process Re-Engineering	Systems Integration / Deployment	Data & Network Communications	Distribution Automation / SCADA	Demand Response / Load Management	Volt/VAR	Prepay	Project / Program Management	Acceptance Testing / Performance Review	Grant Writing	Marketing / Public Relations	Rate Study	UW Insight™
Albuquerque Bernalillo County Water Utility Authority	NM	195,000	■	■	■	■					■						■					
Arizona Public Service	AZ	1,000,000				■											■					
Azusa Light and Water	CA	37,000	■				■										■					
Barbados Light & Power Company		124,000	■	■			■										■					
Bermuda Electric Light Company		35,700	■	■	■	■	■		■	■	■	■				■	■	■		■		
Brownsville Public Utility Board	TX	65,000	■	■	■	■	■			■	■	■			■	■	■					■
Burbank Water and Power	CA	50,000				■											■					
California Public Utility Commission	CA		■	■													■					
Charlotte Water	NC	280,000	■	■			■										■					
Chelan County Public Utility District	WA	53,000	■		■	■											■					■
City of Battle Creek	MI	24,000	■			■											■					
City of Buena Park	CA	20,000	■			■											■					
City of Highland	IL	11,200	■			■											■					
City of Houston	TX	478,000	■			■											■					
City of Jackson	MO	13,000	■	■		■											■					
City of Lee's Summit	MO	30,000	■			■											■					
City of Manassas	VA	26,000	■	■		■	■			■	■			■			■		■			
City of Minden	LA	12,000	■		■	■											■					
City of Monroe	LA	22,000	■			■				■							■			■		
City of Opelousas	LA	7,500	■		■	■	■										■					
City of Richland	WA	43,900	■		■	■											■					■
City of Ruston	LA	20,000	■	■		■	■		■	■	■	■				■	■		■	■		■
City of San Marcos	TX	30,000	■	■					■								■	■				■
City of Santa Rosa	CA	52,000	■				■		■								■					
City of Seguin	TX	15,000	■				■										■					
City of Shreveport	LA	67,000			■							■	■				■					
City of Springhill	LA	2,500	■														■					
City of Topeka	KS	55,000	■		■	■	■			■		■					■		■			
City of Vivian	LA	1,600	■		■	■											■					
City of Wilson	NC	70,000	■	■		■	■			■	■				■		■					■
City of Winnipeg		194,000	■			■						■					■					■
Cleco Corporation	LA		■									■	■				■					
Colonial Pipeline Company	GA											■					■					
Electric Power Research Insititute			■					■									■					
Glendale Water & Power	CA	121,000	■	■						■		■		■			■		■			
Grand Bahama Power Company		18,800	■	■			■										■					
Huntsville Utilities	AL										■	■	■				■					
Long Beach Gas and Oil	CA	144,000	■	■		■	■		■	■							■			■		
Long Island Power Authority	NY	1,300,000	■			■											■					
Los Angeles Department of Water and Power	CA	2,060,000				■											■					
Mayfield Electric & Water Systems	KY	5,500			■									■			■					
Memphis Light, Gas and Water	TN											■	■				■					
Mexico Energy Regulatory Commission					■	■											■					
Miltel Communications			■					■									■					
Nashville Electric Service	TN											■					■					
Orangeburg Department of Public Utilities	SC	60,000	■	■		■	■		■	■	■						■	■	■	■		
Oshawa Public Utilities Commission		55,000	■		■	■											■					
Plaquemines Parish Government	LA	10,000				■											■		■		■	
Sevier County	TN											■					■					
St. Bernard Parish Government	LA	16,000				■											■		■		■	
Texarkana Water Utilities	TX	26,000	■														■					
Town of Danvers	MA	22,000	■	■			■			■	■	■					■					
Turkish Electricity Transmission Corporation					■	■											■					
University of Tennessee at Knoxville			■									■					■					
Utility Consumers' Action Network			■														■					
Village of Freeport	NY	15,000	■				■										■					
Vineyard Energy Project													■	■			■					

© 2016 UtiliWorks Consulting, LLC

3. Project References

We have chosen the following projects to demonstrate performance with other clients with similar scopes of work.

Ruston, Louisiana, 18,000 water/electric			
Name of Business	**Street Address**	**City & State**	**Contract Dates**
City of Ruston	401 N Trenton St	Ruston, LA 71270	Jun 2011 – May 2013
Contact	**Title**	**Telephone**	**Email Address**
Darrel Caraway	Utility Manager	(318) 251-8610	dcaraway@ruston.org
Description of Work Performed			
UtiliWorks assisted Ruston with their Smart Grid Investment Grant (SGIG) application which resulted in the city receiving a matching grant from DOE of $4.3 Million. UtiliWorks conducted an AMI Technology and Business Case Assessment for Smart Metering (Phase 1), and was subsequently hired as the AMI Program Manager to design, procure, and manage the Pilot system and prepare the utility for full-scale deployment (Phase 2).			

Plaquemines Parish, Louisiana, Rate Study			
Name of Business	**Street Address**	**City & State**	**Contract Dates**
Plaquemines Parish, Louisiana	8056 Hwy. 23, Suite 205	Belle Chasse, LA 70037	Sept 2014 – present
Contact	**Title**	**Telephone**	**Email Address**
Michael Jiles	Director of Public Works	(504) 297-5560	mjiles@ppgov.net
Description of Work Performed			
UtiliWorks was hired to assist Plaquemines Parish with the water, sewer and solid waste rate study. The study accounted for revenue requirements, cost of services, and ambitious capital improvement plans given the future operation needs and obligations. It is expected that the rate design will ensure billing efficiency and the utility enterprise operations become financially self-sufficient.			

UCAN, California, Technical Review			
Name of Business	**Street Address**	**City & State**	**Contract Dates**
Utility Consumers' Action Network (UCAN)	3100 Fifth Ave Suite B	San Diego, CA 92103	May 2011 – Mar 2012
Contact	**Title**	**Telephone**	**Email Address**
Don Kelly	Executive Director	(619) 610-9001	donaldkelly619@gmail.com
Description of Work Performed			
UtiliWorks was hired to develop a Technical Review for San Diego Gas and Electric Smart Grid Deployment, which included: evaluating SDG&E's business plan and the cost associated with the business plan for each project; conducting a risk mitigation evaluation of the SDG&E Smart Grid investments proposed in its GRC application; establishing an analytical methodology by which SDG&E can evaluate current and future Smart Grid investments; evaluating alternatives to the products and methods proposed by SDG&E.			

© 2016 UtiliWorks Consulting, LLC

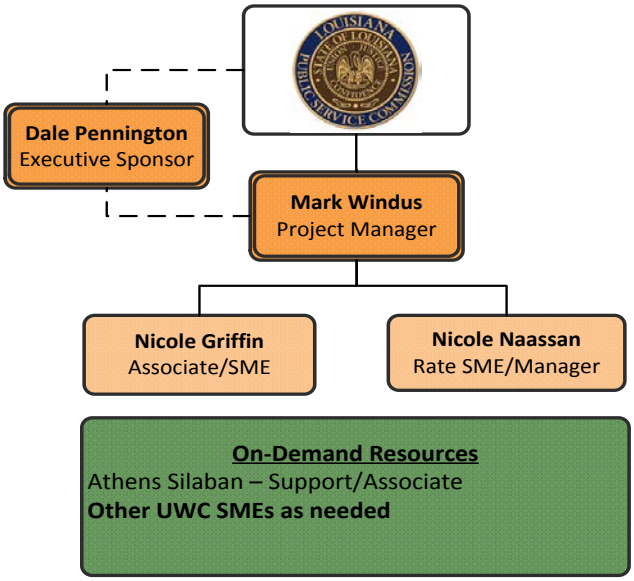
CPUC, California, Expert Witness SDG&E Hearing			
Name of Business	**Street Address**	**City & State**	**Contract Dates**
California Public Utility Commission (CPUC)	505 Van Ness Ave	San Francisco, CA 94102	
Contact	**Title**	**Telephone**	**Email Address**
Tan, Lee-Whei	Project Coordinator	(785) 368-3111	lee-whei.tan@cpuc.ca.gov
Description of Work Performed			
UtiliWorks Consulting, LLC was brought on board as an expert witness for the San Diego Gas and Electric hearings. Critical tasks included: understanding SDG&E's existing IT systems; organizing all data files for the project and historical and current IT upgrade proposals; reviewing overall system design and database; assessing upgrades to SDG&E's customer assistance website to determine if these changes will provide desired functionality; evaluating if SDG&E's customer outreach, education, and marketing plans are likely to be effective. Further evaluation of the cost of the above proposed changes were made to determine if the costs were truly incremental and reasonable, as well as quantifying what "reasonable" costs would be. UtiliWorks also assisted the DRA in developing a litigation position, preparing written testimony, testifying before the California Public Utility Commission, and participating in settlement discussions.			

© 2016 UtiliWorks Consulting, LLC

1. Organization Chart

Our proposed project team for LPSC is assembled of experts in the industry, having successfully completed numerous feasibility studies, technology procurement efforts, rate reviews and expert witness assignments. Our deep bench of subject matter experts will contribute throughout this effort in both active and advisory roles.

Figure 1 – Project Org Chart



UtiliWorks will perform work and at our corporate headquarters in Baton Rouge, LA and onsite at appropriate points/intervals throughout the effort to hold workshops and interviews and present results and recommendations. Travel expenses will be minimal as our headquarters are located approximately 8 minutes from LPSC's offices in downtown Baton Rouge.

2. Biographies of Team Members

A brief description of each team member is outlined below with full resumes provided in Tab 6 – Appendices for your reference.

Dale Pennington Executive Sponsor	Mr. Pennington is the business and technology solution architect for UtiliWorks. He has extensive knowledge of the technology, software and networking components that are utilized in the utility market (electric, water and gas). By utilizing proven workflow and asset management techniques that he has practiced over the last 25 years, Dale is able to assist clients in maximizing the benefits of the their technology investment.

© 2016 UtiliWorks Consulting, LLC

Mark Windus Project Manager	As your Project Manager, Mr. Mark Windus will be the focal point and primary point of contact for LPSC to coordinate and lead all aspects of the project. Mr. Windus brings over 14 years of senior level project management and consulting experience for Utility customers. Mark's background also includes 15 years managing the financial and operational performance of telecommunications services at the General Manager and Director level. Mark is a proven leader, successful at motivating fellow associates and implementing programs that exceed customer expectations.
Nicole Griffin Associate/SME	Ms. Nicole Griffin will provide peer review and support to the Project Manager. Nicole supports project activities by performing industry research, preparing critical documentation including in-depth reporting, and developing public relations campaigns for utility clients. Nicole also administers UtiliWorks Insight, Web-based analysis and assessment tool for clients. Her responsibilities also include grant writing and reporting.
Nicole Naassan Rate SME/ Manager	Ms. Nicole Naassan has over twenty (20) years of experience in the energy sector and specializes in project management and utility operations. She is well versed in metering system assessment, meter to cash analytics, process re-engineering, regulatory compliance and utility ratemaking. Nicole has been the lead on ratemaking and capital planning/implementation activities for multiple UWC clients.
Athens Silaban Associate/SME	Mr. Athens Silaban will develop project deliverables, provide analysis and coordinate closely with the Project Manager to address all project requirements. Athens brings an engineering background with experience in financial modeling, data analytics, technical writing and project coordination. He also has experience in ratemaking process through developing rate models, analyzing financial statements and providing insight on cost of service scenarios. He is a critical team member in ratemaking initiatives at UtiliWorks Consulting and provides analytical thinking to support the delivery of successful ratemaking projects.

UtiliWorks Consulting may include other resources on the project if necessary. To gain an understanding of UtiliWorks staff that may be included in the project, please see their resumes provided in the section - Resumes.

*"UtiliWorks personnel are very easy to work with, knowledgeable in subject matter, and helped keep our project on track" – **Eddy Hernandez, Brownsville Public Utilities Board, TX***

© 2016 UtiliWorks Consulting, LLC

1. UtiliWorks Consulting Description

UtiliWorks is a boutique consulting firm that specializes in providing professional services in the municipal electric, water, and gas utility space. Together with our clients, UtiliWorks advances business and technology solutions that strategically enhance utility operations. We focus on the delivery of various services that will drive performance throughout your organization. Our people, processes, and analytical tools work in conjunction to lower cost, reduce risk, and ensure benefits capture for your technology implementation.

Founded in 2005, UtiliWorks is based in Baton Rouge, Louisiana but has worked with utilities across the United States and abroad as they evaluate the financial, technological and operational changes necessary to modernize. The secret is in our staff, made up of a dedicated group of professionals with deep roots in the utility industry. We leverage the skills and expertise of a diverse mix of engineers, project managers, financial experts, and system integrators.

Figure 2 – Map of UtiliWorks Clients

© 2016 UtiliWorks Consulting, LLC

2. Work Plan

Project Kickoff Meeting and Mobilization
UWC will establish communication with LPSC's project sponsor or point of contact and schedule the formal kick-off meeting. The meeting is intended to introduce the project team, coordinate and confirm project objectives, project timeline, and to explain scope of work deliverables and anticipated effort of both UWC and LPSC for the project.

Data Collection
UtiliWorks will provide the LPSC with a comprehensive list of data and information requests that will include items such as: BEC's FRP application, testimony and exhibits, BEC's financial data, capital improvement plans, customer demographics and other data points. The data collection will initiate shortly after the kickoff meeting and will continue with additional iterations as UWC continues to understand BEC's application for LPSC. This phase will educate UWC on the BEC's proposed FRP, its drivers and challenges, the billing system capabilities, cost of service delivery while providing insight on potential future rate structures.

UWC will also research current and recommended rates for other Louisiana electric utilities, especially co-ops.

UWC Representation/Expert Witness
UtiliWorks' experts on the subject will be prepared to participate in the formal status conferences, informal conference calls, pre-trial conferences, depositions and hearings, meetings and conferences with LPSC and attending any necessary B&Es. Our experience in working with electric utilities, including coops, will provide value and benefits in the sessions we attend. We are committed to assist LPSC through the conclusion of the docket through the Commission vote and with each of the four proposed annual review filings, test years 2015-2018.

Formula Rate Plan Application Analysis and Review
With the data and information collected from the data requests and meetings participation, UWC will be capable in analyzing BEC's operations, books and records for purposes of determining the just and reasonable rates, which may include calculation of rate base, rates of return and capital structure. We will consider the incentive based rate mechanism, accounting standards and practices for electric co-ops, appropriate ratemaking adjustments, NARUC-approved cost of services methodology for co-ops, appropriate rate base of a utility plant investment, traditional cost of service and cost allocation methodologies, capital cost, depreciation and taxation, and other factors that are deemed pertinent.

Reporting/Expert Testimony Development
UWC will review its findings and recommendations with LPSC and determine if additional development is required. If it warrants further action items, UWC will address them and provide review cycles to finalize our Expert Testimony.

Upon finalization of our Expert Testimony, UWC will submit its findings and recommendations in a final report to LPSC.

3. Proposed Schedule

As LPSC itself mentioned in the RFP that the time period of representation may vary greatly depending upon whether the matter is contested, we are unable to provide a fixed timeline to complete the application review. However, we are committed to work with LPSC in the estimated 6-9 months of the application review and the 3-6 months for the annual review filings.

© 2016 UtiliWorks Consulting, LLC

© 2016 UtiliWorks Consulting, LLC

1. UtiliWorks Consulting Hourly Rates

Please find the rates of UtiliWorks Consulting's resources that potentially will be working with LPSC on this project. The resource and amount of hours will be dependent based on the scope of work requested by LPSC and further discovery during the engagement.

Resource Title	Hourly Rate
Executive Consultant	$285/hour
Manager	$215/hour
Associate	$185/hour
Analyst	$155/hour

Plus travel and expenses at cost. Most travel will be minimal as our resources and headquarters are located in Baton Rouge, Louisiana.

*"UtiliWorks was a great consultant for Orangeburg DPU. Their experience with AMI and Meter Data Management Systems was outstanding." – **John Bagwell Orangeburg Department of Public Utilities***

© 2016 UtiliWorks Consulting, LLC

1. Resumes

DALE PENNINGTON

UtiliWorks Consulting, LLC

UtiliWorks Managing Director – Executive Sponsor

Mr. Pennington is the Managing Director of UtiliWorks based in New York with over 30 years of expertise working with utilities and emerging technologies. He has extensive knowledge of the intersection of business and technology in the utility space. By utilizing proven workflow and asset management techniques that he has practiced over the last twenty (20) years, Dale is able to assist clients in maximizing the benefits of the their technology investments.

Specialization

- Advanced Metering Infrastructure
- Smart Grid Design
- Meter Data Management
- Business Process Re-Engineering
- Technology Migration
- Change Management
- Smart Grid Deployment and Management
- Market Research

Education and Certifications

- **MS Geophysics**, Adelphi University, Garden City, NY *(1982)*
- **BS Marine Science and Political Science**, Long Island University, Brookeville, NY *(1978)*
- **BA Geology and American Studies**, Long Island University, Brookeville, NY *(1978)*

Relevant Project Experience

Long Beach Gas and Oil, CA
UtiliWorks initially provided an AMI Assessment for Long Beach Gas and Oil (144,000 gas meters) and City of Signal Hill (3,100 water meters), and was subsequently hired for the Procurement, Pilot and Full deployment phase. Mr. Pennington is providing ad hoc activities to support Long Beach's project team, including being an industry expert in City Council briefings and City Officials meetings.

Albuquerque Bernalillo County Water Utility Authority, NM
Mr. Pennington participated in the procurement and design support project for ABQ, water utility with 195,000 endpoints. Dale provided an analysis role in reviewing the business case for ABQ and the associated benefits. Dale's knowledge of the various technology vendors was leveraged during the RFP design and review process. Dale participates in vendor site visits, interviews and contract negotiations.

City of Topeka, KS
Mr. Pennington strategized planning for long term management of the water utility's assets – including 55,000 water meters. This included system wide communication review for major city services. Dale reviewed critical industry and vendor information and developed a Vendor Technology Matrix supported with explanations of how those products and system characteristics could impact the City. He clarified any specific features the owner wanted to include in future project development as well as educating the utility of AMI benefits.

City of Houston Water System, TX
Mr. Pennington conducted an AMI Assessment to identify all critical issues regarding the development of a Fixed Network AMI technology for ultimate build

© 2015 UtiliWorks Consulting, LLC

 © 2016 UtiliWorks Consulting, LLC

out of 468,000 meters. Subject areas of the assessment included: the overall cost and benefits to the city, the impact on operational teams and customers, and the issue of revenue enhancement and protection. Other tasks included: Analyze AMI technology designs in regards to their strengths and weaknesses; the use of open standards; Produce an AMI Strategy and Technology Road Map for the city to move forward; develop an AMI pilot that will include design, procurement, and implementation tasks utilizing City of Houston resources for installation.

Bermuda Electric Light Company (BELCO) – Hamilton, Bermuda
Mr. Pennington sits on BELCO's executive steering committee for their Smart Grid Modernization program, and leading UtiliWorks team effort in providing technical and business expertise for BELCO. UtiliWorks was hired to assist BELCO from AMI/Smart Grid assessment, procurement, and pilot through full- deployment phases.

Barbados Light and Power Company (BLPC) and Grand Bahama Power Company (GBPC)
UtiliWorks Consulting provided both BLPC and GBPC (total 140,000 electric meters) with procurement consultative services, which include RFP and requirements development, RFP administration, vendor proposal evaluations and selection. Mr. Pennington provided executive oversight and expert judgment throughout the process.

California Public Utility Commission, CA
Mr. Pennington was an expert witness for both the Pacific Gas & Electric and San Diego Gas & Electric hearings. The PG&E project cost amounted to $290,000 and the SDG&E project cost was $149,630. Dale's role was to understand Utility's existing IT systems and whether the request to modify and augment them in order to implement dynamic pricing is reasonable. Dale also analyzed the proposed upgrades to the customer-assistance website to determine if these upgrades will carry out the desired functionality or not. Dale helped CPUC determine whether the costs associated were truly incremental and reasonable. Dale assisted the DRA in developing a litigation position, preparing written testimony and testifying before the Commission, and participating in settlement discussions.

Utility Consumer's Action Network, CA
Mr. Pennington was the project manager for the Technical Review for San Diego Gas & Electric (SDG&E) Smart Grid Deployment. The contract value amounted to $260,000. Dale was responsible for analyzing SDG&E's proposed Smart Grid infrastructure. The project also included evaluating the business plan and associated costs, conducting a risk mitigation evaluation, establishing a methodology for current and future state Smart Grid evaluations, developing alternative smart grid deployment plans. Dale also wrote and revised written testimony. Dale assisted UCAN in developing a litigation position, testifying before the Commission, and participating in settlement discussions.

Long Island Power Authority, NY
LIPA contracted UtiliWorks Consulting, LLC to assist in the evaluation and design of their smart grid infrastructure over an anticipated five year deployment period (1,300,000 endpoints). Mr. Pennington has performed the following services for LIPA: Gap Analysis for all critical components for successful Smart Grid Initiative, Develop Strategy for Smart Grid Pilot, Review Vendor responses to RFP for AMI Pilot, Provide next step recommendations for Smart Grid Pilot test and present them to executive team members.

© 2015 UtiliWorks Consulting, LLC

 © 2016 UtiliWorks Consulting, LLC

DALE PENNINGTON

Previous Experience

Independent Executive Consultant, 1998-2004

P.I./Dwight/Petro Consultants
Executive Vice President, 1992-1998

Schlumberger
Geophysicist, 1985-1992

ARCO Exploration
Geophysicist, 1981-1985

Publications and Speaking Engagements

- Speaker at EVOLVE: The 2014 Sensus Utility Conference, November 2014 on the topic of Data Analytics for Water Utilities.
- "Water Infrastructure Management in an Era of Evolving Data Analytics." Aclara Client Conference, May 2014.
- "Optimizing Renewable Projects, Plug-in Electric Vehicles, Home Area Networks and Tactics on Building a Smart Grid." Energy, Utility and Environmental Conference, February 2014.
- Participated in a panel session titled "Enterprise Information and Asset Management Track: Using AMI Data for Added Value Operational Solutions." Distributech 2014, January 2014.
- "Next generation Smart Metering and what to do to maximize the benefits of Smart Metering." Harris Customer Training Conference, November 2013.
- "Utility Case Study: Brownsville Public Utility Board." EUCI Volt/Var Optimization Conference, June 2013.
- "Advanced Metering Infrastructure (AMI) Update." Municipal Electric Power Association of Virginia, May 2013.
- "Smart Grid is Won or Lost in the Back Office." NRECA Tech Advantage Conference, February 2013.
- Participated in a panel session titled "A Consultant's Guide to the Smart Water Network Lifecycle." Distributech 2013, January 2013.
- "Understanding Demand Side Management and the Smart Grid." UtiliMetrics Autovation 2010, September 2010.
- "Home Area Networks, Risk and Reality in the Smart Grid." Greentech Media, Inc., June 2010.

© 2015 UtiliWorks Consulting, LLC

© 2016 UtiliWorks Consulting, LLC

MARK WINDUS

UtiliWorks Consulting, LLC

Manager – Assistant Project Manager

Mr. Windus is an UtiliWorks Manager/Consultant who brings over 14 years of senior level project management and consulting experience for Utility customers. Mark's background also includes 15 years managing the financial and operational performance of telecommunications services at the General Manager and Director level. Mark is a proven leader, successful at motivating fellow associates and implementing programs that exceed customer expectations.

Specialization

- Project Management
- Sub-contractor management
- Electric, Gas & Water Utility operations
- Strategic assessment
- Risk analysis & mitigation
- AMI & Smart Grid Implementation
- Business case analysis
- Procurement (RFI/RFP development)
- Vendor evaluation/selection
- Contract development and negotiation

Education and Certifications

- Bachelor of Science, Political Science and Psychology, State University College of New York at Brockport
- Six Sigma Plus Green Belt Certification

Relevant Project Experience

Charlotte Water, NC
Mr. Windus is currently involved with the Water Meter Upgrade Program for Charlotte Water (275,000 water meters). Mark is leading the UtiliWorks team in evaluating vendor's RFP responses assisting the utility in selecting the vendor who will best meet the goals and requirements of the City Water Department for their water meter upgrade program.

Bermuda Electric Light Company (BELCO) – Hamilton, Bermuda
Mr. Windus is the UtiliWorks' Project Manager for BELCO's Smart Grid Modernization project (38,000 electric meters). Mark is working with BELCO managing the Pilot deployment and the project planning for full deployment, additionally; business process optimization, IT/Interfaces and systems integrations.

Previous Experience

TMG/Langham Consulting Inc. ***(Senior Consultant, 2013-2014)***

- Provided consulting services for utilities and city/county governments guiding senior management through the decision making processes associated with the purchase and implementation of systems integration technologies.
  - 157,000 gas and water meters at City of Long Beach, CA. Mark assisted with the data gathering requirements, SOW development, organization and public release of the AMI & MDM RFP for the

© 2015 UtiliWorks Consulting, LLC

© 2016 UtiliWorks Consulting, LLC

City of Long Beach, CA. He was subsequently involved in the response evaluations including reference checks and vendor scoring.

- Strategic assessment, business case analysis, risk analysis & mitigation, procurement (RFI/RFP development), vendor evaluation/selection, contract development and negotiation.
- Overall project management including; Initiate, Plan, Execute, Control and Close projects. Administer and complete sub-projects and activities that cross multiple functional areas.

Elster AMCO Water ***(Senior Project Manager, 2008-2013)***

- As a Senior Manager of the Technical Department at the North America manufacturing facility operations center, Mark was responsible for implementing and managing all Turnkey AMR/AMI technology projects for utility customers - including County of Henrico Water Utilities (Henrico, VA) a 95,000 residential/commercial water meter installation program plus a vault replacement/restoration project.
- Elster's primary point of contact responsible for planning, administering and completing all turnkey automation/systems implementation projects. Provided management of technology vendors and sub-contractors, coordination between multiple functional areas in the manufacturing facility including sales, bids/proposals, customer service, IT, production, engineering, repair service and accounting.
- Responsible for the successful implementation and completion of projects generating $40 million in revenue.

Grid One Solutions, Inc. ***(Project Manager, 2007-2008)***

- Responsible for all operations associated with managing the implementation of technology projects designed to drive operating efficiencies for utility customers – including as the Prime contractor, managing advanced metering system implementation projects.
- Responsible for all project operations including; development of synergies between minority business partnerships, technology providers and all subcontractors.
- Developed and managed $35 million operating budget, P & L, hiring, training, safety, quality and corporate reporting requirements.

Honeywell ***(Senior Program Manager, 2001-2007)***

- Responsible for managing the implementation of electric, gas and water utility technology projects designed to drive operating efficiencies, including:
  - 250,000 water meters and 350,000 electric meters for Jacksonville Electric Authority (Jacksonville, FL) advanced metering infrastructure, and relocation of water meter service from driveways/sidewalks to approved right of ways, new water meter pit/box installations.
  - 1,200,000 residential electrical meters for Progress Energy (Central/West Florida).
  - 500,000 residential and commercial electric, water and gas meters for Colorado Springs Utility (Colorado Springs, CO).
- Managed multiple operations with teams of up to 90 associates and sub contract employees. Responsible for the development and management of operating budgets, P & L, customer service and all

© 2015 UtiliWorks Consulting, LLC

 © 2016 UtiliWorks Consulting, LLC

corporate reporting requirements. Participated in bid/ RFI/RFP process, sales presentations and support of trade shows.

Comcast Communications, Inc. ***(General Manager 2000-2001)***

- Responsible for the overall financial and operating performance of multiple cable television systems, customer call centers, store front, sales, advertising, field service and administrative departments.
- Created and managed $20M annual operating budget. Managed system to 54% cash flow - top of Southeast Division.
- Responsible for managing a $30M technology upgrade and implementation of digital and internet platform.

BellSouth Entertainment, Inc. ***(Area Manager, Sales and Marketing 1998-2000)***

- Responsible for developing all sales and marketing programs designed to achieve customer and revenue targets.
- Developed and implemented all local media and advertising plans, strategies and tactics to support sales channels in multiple markets.
- Recruited, hired, trained and managed 25 field sales representatives and staff support personnel for multiple markets. Managed system to 54% cash flow - top of Southeast Division.

© 2015 UtiliWorks Consulting, LLC

 © 2016 UtiliWorks Consulting, LLC

NICOLE GRIFFIN

UtiliWorks Consulting, LLC

Associate – Project Manager

Mrs. Griffin's is an Associate for UtiliWorks Consulting, LLC based in Baton Rouge, LA. Her responsibilities include project management and assurance of client deliverables. Nicole supports project activities by performing industry research, preparing critical documentation including in-depth reporting, and developing public relations campaigns for utility clients. Nicole also administers UtiliWorks Insight, Web-based analysis and assessment tool for clients. Her responsibilities also include maximizing national media outlets, increasing sales activities and growing the overall communications channel.

Specialization

- Project Management
- Technical Writing
- Industry research
- Grant Writing and Reporting
- Proposal (RFP) Management
- Marketing
- UtiliWorks Insight™ Administration
- Public Awareness Campaigns

Education and Certifications

- **BS Journalism and Media Studies** - Rutgers University, 2009
- **BS Environmental Science** - Rutgers University, 2009
- **Certified Project Management Professional (PMP)** - The Project Management Institute, 2013
- **Certified Six Sigma Black Belt** - 2014
- **Certified Social Media Specialist** - Louisiana State University, 2013
- **Completed the Louisiana Water Operator Certification Exam for Level 1 Distribution, Production and Treatment**
- **Completed the Louisiana Wastewater Operator Certification Exam for Level 1 Collection and Treatment**

Relevant Project Experience

Bermuda Electric and Light Company (BELCO) – Hamilton, Bermuda
Mrs. Griffin supported multiple procurement efforts for BELCO, including RFP administration for AMI, MDM, Prepay and IVR. Nicole also assisted in the development of an internal education and public awareness campaign for BELCO which included content development for presentations, press releases, and customer information pieces. Nicole continues to support the BELCO program with PMP and Six Sigma principles.

Barbados Light & Power Company (BLPC) and Grand Bahamas Power Company (GBPC) – Bridgetown, Barbados and Freeport, Grand Bahamas
Mrs. Griffin worked with both BLPC and GBPC to define the goals and objectives of their AMI/ MDMS program, as well as specify system requirements for each utility. Nicole managed

© 2015 UtiliWorks Consulting, LLC

© 2016 UtiliWorks Consulting, LLC

the development and publication of the joint RFP for BLPC and GBPC. She led the shortlist meetings and assisted the utilities in evaluating all viable solutions until a vendor was selected.

Long Beach Gas and Oil (LBGO) – Long Beach, CA
Mrs. Griffin led the development of a robust public awareness and internal education campaign on behalf of LBGO. The program includes development of an array of public relations materials including brochures, Frequently Asked Questions (FAQs), a dedicated webpage, customer letters, press releases, etc. Nicole also assisted LBGO in developing materials and facilitating meetings to educate LBGO staff on the AMI program.

City of Ruston Light and Power- Ruston, LA
Mrs. Griffin structured Ruston's Smart Grid public awareness program. She developed and monitored a series of press releases, a Smart Grid brochure, periodic status letters, and a three-tiered message sequence to educate Utility employees and respond to inquiries. She also developed a Social Media campaign to support Ruston's Public Awareness program for Prepay.

Nicole performed ample research to assist in the evaluation of incorporating new technologies such as home energy management technologies, solar panels and plug in vehicles.

Nicole played a key role in the Department of Energy Reporting required upon Ruston's award of the Smart Grid Investment Grant in 2009. Nicole drafted, submitted and monitored acceptance of all reports for the 3 year program. Additionally, Nicole monitored the project to assure all deliverables were met on time and on budget.

California Public Utility Commission- San Francisco, CA
Mrs. Griffin researched Smart Grid technologies related to the applicability of various pricing programs. This included analysis of home energy management tools and case studies on customer messaging. Nicole was able to integrate her findings into the testimony used by CPUC. She also organized the progress meetings and distributed critical project information.

Monroe Water Department- Monroe, LA
Mrs. Griffin developed and coordinated the delivery of customer notification materials for Monroe's AMI project including press releases, mailed notices, bill inserts, etc. Nicole also facilitated the progress meetings between the City, project vendors, installers, consultants and engineers on a regular basis. She disseminated other critical documentation throughout the project.

Orangeburg Department of Public Utilities (DPU) - Orangeburg, SC
In addition to managing DPU's customer outreach campaign, Mrs. Griffin assisted in project management activities to see the AMI/ MDM project through to completion. In recognition of DPU's accomplishments, Nicole generated a case study which gained national recognition.

Brownsville Public Utility Board- Brownsville, TX
Nicole provided Project Management services to track the program's progress against the customer's expectations. Nicole also monitored the AMI systems performance to assure all the functionality was utilized and measured.

© 2015 UtiliWorks Consulting, LLC

 © 2016 UtiliWorks Consulting, LLC

Additionally, Nicole assisted with Board Room presentations and project reporting.

Vineyard Energy Project- Martha's Vineyard, MA
On behalf of UtiliWorks, Nicole managed the DOE reporting efforts for Vineyard Energy project for their Smart Grid Investment Grant (SGIG). VEP was in full compliance and all reports were submitted prior to deadlines. UtiliWorks has also been the liaison between the DOE and Utility clients concerning all communication during the grant period.

Previous Experience

Endurance Specialty Holding, LTD – New York, NY
As a member of the marketing department, Nicole assisted in the development of business collateral and improved the Insurance/ Reinsurance Company's search engine optimization. Nicole also prepared quarterly statistics reports and developed.

Publications

- "AMI Project Advances to Full Implementation," a case study on Orangeburg DPU was published by Transmission & Distribution World Magazine in May, 2014.
- "Ruston's successful smart grid, smart metering project... a smart grid case study," appeared in Smart Grid News in April, 2014.
- "Electric Vehicles: Fact and Fiction" was featured by Smart Grid News in November, 2011.
- "Demand Side Management- Fitting the Pieces Together" appeared in the 2010 May issue of Electric Light & Power Magazine."
- Energy Efficiency and the Smart Grid" was published in the November 2010 edition of Power Grid International Magazine.

© 2015 UtiliWorks Consulting, LLC

 © 2016 UtiliWorks Consulting, LLC

NICOLE NAASSAN

UtiliWorks Consulting, LLC

Manager / Senior Consultant

Ms. Nicole Naassan has over twenty (20) years of experience in the energy sector and specializes in customer back office systems deployment and integration. She is well versed in advanced metering system assessment, meter to cash analytics, process re-engineering, regulatory compliance, and utility ratemaking.

Location: Atlanta, GA

Specialization

- Project Management
- Business Case/Cost Benefit Analysis
- AMI Assessment
- Business Process Development
- Customer Back Office Systems Integration
- Meter to Cash

Education / Certifications

- **BBA, Economics and Finance, Graduated with Honors**, New Mexico State University, 1992
- **Constellation Management Development Program**, Constellation Energy, 2005
- **NARUC Annual Regulatory Studies Program**, The Eli Broad Graduate School of Management, 1993

Professional Awards & Affiliations

- Constellation Energy Key Contributor Award, 2006
- FERC Commendation for Outstanding Achievement, 1994
- FERC Award for Superior Job Performance, 1993, 1994, 1995, 1996
- International Association for Energy Economics

Relevant UtiliWorks Experience

City of Long Beach, CA

Ms. Naassan is the Project Manager overseeing the three-year deployment of an AMI System for the Long Beach Gas and Oil Department (LBGO). Specifically, Ms. Naassan is responsible for the management and coordination of all client and vendor activities. Prior to this engagement, Ms. Naassan was the Project Manager overseeing the development of a feasibility study and the procurement effort.

Brownsville Public Utility Board (BPUB), TX

UtiliWorks was hired by BPUB to develop a Smart Grid implementation roadmap, including technology and business plans. Ms. Naassan conducted key business process mapping and analysis required to prepare BPUB for the deployment of an AMI and MDM pilot project. Ms. Naassan also conducted project coordination and management activities.

City of Santa Rosa, CA

Ms. Naassan is currently managing the procurement of an AMI system for the City of Santa Rosa water utility. Responsibilities include overall project management, RFP development, vendor response analysis, and cost normalization.

City of Buena Park, CA

UtiliWorks is currently engaged with the City of Buena Park water utility to conduct an AMI/AMR assessment and develop a grant application. Ms. Naassan is the Project Manager overseeing these efforts.

City of Richland, WA

UtiliWorks is currently engaged with the City of Richland to provide Smart Grid planning and program implementation oversight. Ms. Naassan is the Project Manager supporting this effort.

© 2014 UtiliWorks Consulting, LLC

© 2016 UtiliWorks Consulting, LLC

City of Winnipeg, Canada Water and Waste Department

UtiliWorks provided the City of Winnipeg an AMI Assessment and Business Case study for the implementation of an advanced water metering solution. Ms. Naassan assisted with the development of the business case and supporting deliverables. The report outlined results, key issues, and recommendations on how best to proceed.

Utility Customers' Action Network (UCAN)

UtiliWorks was retained by UCAN to critically review aspects of the San Diego Gas & Electric Company (SDG&E) 2012 General Rate Case (GRC) application related to twelve (12) proposed Smart Grid infrastructure projects. Specifically, UtiliWorks was asked to analyze the proposed technology, system design and cost, and provide expert testimony supporting our position. Ms. Naassan was the Project Manager responsible for the oversight, coordination, and development of discovery and research, expert testimony and supporting work papers, cross examination, and witness preparation.

City of Topeka, KS

UtiliWorks provided technical and business evaluation of AMI, CIS, and SCADA systems, including analysis and recommendations of area assessments, formulation of an overall business strategy, and an Automation Master Plan to leverage future planned communication infrastructure and subsequent platform integration. Ms. Naassan developed the RFP for a Customer Information System (CIS).

City of Wilson, NC

UtiliWorks was hired to conduct an AMI assessment and develop an RFP for the City of Wilson. The scope of the effort was to educate the City of Wilson and identify the costs, benefits, opportunities and concerns to help guide the decision to deploy an AMI system. Ms. Naassan was the Project Manager overseeing the current state definition, business case development, AMI technology review and recommendations, training workshop, and RFP development.

Previous Work Experience

Operations Consultant, Alexandria VA *(2007-2011)*

Developed effective strategies and innovative solutions to challenges related to people, processes, and technology for clients engaged in deregulated energy sales and support. Services offered: business process re-engineering, project management, business planning, end user system and process training, and team building.

- Retained by a New York based CIS software provider to serve as co-project lead for a large-scale utility billing system implementation valued at $3.5 Million.
- Identified the need and instituted a standardized process to manage software releases for a New York based CIS software provider. Worked with the Client's development team to formulate and execute a detailed plan to test and deploy software version upgrades to Customers. This process gave the Client the ability to troubleshoot problems prior to release, restored Customer confidence, and was adopted by the Client for future deployments.
- Designed, developed and facilitated a five course CIS software training program for a New Jersey based competitive energy supplier with annual operating revenues of over $3.0 Billion. Each course was customized to meet the needs of specific functional groups within the organization: Billing, Customer Service, Sales Support, Financial Reporting, and Contract Administration.
- Retained by the North America's leading competitive energy supplier to identify and resolve operational issues adversely affecting customer satisfaction in the New England market. Drove a major improvement in

© 2014 UtiliWorks Consulting, LLC

© 2016 UtiliWorks Consulting, LLC

productivity, while expediting customer issue resolution through training and by improving collaboration and facilitating communication across the operations, sales, and pricing teams.

Constellation New Energy, Inc., New York NY ***(Director of Operations 2003-2006, Billing Manager 2000-2003)***

Led the Metro North operations team during a key expansion period with revenue growth from $300 Million to over $1 Billion annually. Managed a multi-functional team of fifteen (15) including managers, business analysts, systems administrators, and vendors responsible for billing, contract management, product deployment, IT systems, and data management. Sponsored and managed numerous special projects including business critical system installations and upgrades, business process improvement and automation.

- Promoted to rebuild and lead the Mid-Atlantic regional operations team in 2005. Mentored and promoted key individuals within the organization to fill leadership roles and recruited and trained new team members. Implemented operational best practices throughout the order-to-cash process. These efforts produced a cohesive operations team and improved overall efficiency, accuracy, and cash flow.
- Developed and executed the operations strategic plan supporting expansion into six (6) newly deregulated retail markets in New York State. Collaborated with and advised sales team on best practices for structuring new product offerings to ensure competitiveness, manage operational risk and satisfy customer needs.
- Project manager in charge of a major billing system upgrade budgeted at $500K. Directed multi-functional project team; defined business requirements and project scope; formulated project plan; designed and managed execution of test plan. Project completed successfully, on time, and within budget.
- Project manager in charge of the implementation of an Electronic Data Interchange (EDI) platform to satisfy B2B data exchange requirements. Advised throughout the vendor selection process; defined requirements and project scope; managed multi-functional project team responsible for technical design, deployment, and testing. Project completed successfully, on time, and within budget.
- Led the Metro North region to a consistent ranking as one of the top revenue-generating and lowest cost regions across the U.S. and Canada while maintaining a perfect record of zero customer complaints for four (4) consecutive years as tracked by the New York Public Service Commission.

Pace Global Energy Services, Fairfax VA ***(Manager, Power Markets and Modelling 1999-2000, Senior Analyst 1996-1999)***

Managed and developed power market studies, due diligence analyses, and energy price forecasts for domestic and international markets. Results used by power developers and financial institutions to secure project financing and by industrial clients to develop purchasing strategies and assist in the assessment of self-generation versus power purchase option.

- Assessed the expected future competitiveness and debt recovery associated with the purchase of Duquesne Light Company's fossil fired power plants by Orion Power Midwest. The 2,614 MW portfolio was valued at $1.7 Billion.
- Conducted a power market simulation of PJM and New York State to value the long-term market opportunities and relative economic competitiveness of three (3) power plants located in Northern New Jersey totaling 1,037 MW. Acquisition valued at $850 Million.
- Contributed to the development of a detailed corporate energy strategy for an international Fortune 200 paper company with over 80 facilities nationwide.

© 2014 UtiliWorks Consulting, LLC

 © 2016 UtiliWorks Consulting, LLC

Federal Energy Regulatory Commission (FERC), Washington DC ***(Public Utilities Specialist, Office of Electric Power Regulation, Division of Investigations 1992-1996)***

Drafted and delivered expert testimony on behalf of Commission Staff. Independently analyzed and evaluated numerous applications filed by regulated utility companies and wholesale electricity customers to establish conformance with FERC rules, regulations, policies, and decisions. Participated in settlement conference negotiations and assisted staff attorneys in conducting discovery, preparation of cross-examination, and drafting of legal briefs.

© 2014 UtiliWorks Consulting, LLC

© 2016 UtiliWorks Consulting, LLC

ATHENS SILABAN

UtiliWorks Consulting, LLC

Analyst

Mr. Silaban is a UtiliWorks Analyst based in Baton Rouge, Louisiana coming from an engineering background and leverages his education and experience to provide UtiliWorks' clients valuable analysis, design and project management. He provides support and coordination for both UtiliWorks' Service Delivery and Sales team.

Specialization

- Data Collection and Analytics
- Engineering Modeling
- Financial Modeling
- Statistical Analysis
- Technical Writing
- Database Management
- Data Analytics
- Project Management
- Customer Relationship Management (CRM)

Education and Certifications

- **MS, Environmental Engineering**, Louisiana State University, Baton Rouge, LA *(May 2013)*
- **BS, Chemical Engineering**, Gadjah Mada University, Yogyakarta, Indonesia *(December 2009)*
- **Fundamentals of Engineering – Chemical**, NCEES Certification *(October 2012)*
- **Louisiana Engineering Society member**

Relevant Project Experience

Charlotte Water – Charlotte, North Carolina

Mr. Silaban worked with UtiliWorks team for Charlotte's Water Meter Upgrade Program (280,000 water meter endpoints) and assisted with RFP response evaluation criteria, vendor evaluation, and providing Charlotte Water with AMI vendor recommendation.

Bermuda Electric and Light Company (BELCO) – Hamilton, Bermuda

Mr. Silaban worked with BELCO on their various work streams related to their electric grid modernization programs (38,000 electric endpoints). Those work streams include: (1) Business Process Re-Engineering, (2) IVR system Procurement, (3) Radiofrequency impact study, (4) Overall Project Management and (5) Project monthly cash outlay data gathering and analysis.

Oshawa Public Utilities Commission (PUC) – Oshawa, Canada

Mr. Silaban assisted Oshawa PUC with the writing, data collection and analytics of a Roadmap and Financial Analysis that supported Oshawa PUC's rate case that was presented to Ontario Energy Board, in relationship with an advanced metering infrastructure (AMI) implementation and their supporting programs.

City of Buena Park – Buena Park, CA

The City of Buena Park (20,000 water endpoints) contracted UtiliWorks to perform an AMI Assessment. Mr. Silaban contributed to the assessment by performing an AMI vendor technology research and developed a vendor matrix for the City to help them better understand the current state of the AMI market technology.

© 2015 UtiliWorks Consulting, LLC

© 2016 UtiliWorks Consulting, LLC

2. Industry Recognition

A. Awards

- **UtiliWorks' client, the City of Orangeburg's Department of Public Utilities (DPU) received the "Best Smart Infrastructure Project of the Year" award at CS Week 2015.** The awards were announced and distributed during the general session for CS Week on Wednesday, April 29, 2015 in Charlotte, North Carolina.
- **UtiliWorks was nominated as one of the top 25 companies to watch in 2014 by SmartGridNews.com**. UtiliWorks made it to the fifth and final round of voting in January 2014.
- **UtiliWorks Consulting was recognized at Louisiana Business Technology Center's (LBTC) Silver Anniversary Event** for outstanding achievements as a graduate of their twenty-five year history in Baton Rouge, LA on November 2013. Charles D'Agostino, Executive Director of the LBTC says, "The successful 25 year history of the LBTC at LSU could only be possible because of successful entrepreneurs and businesses like UtiliWorks which have the business idea, drive, and persistence to execute their business plan and act on the advice of the business counselors at the LBTC. The UtiliWorks team exemplifies the success of a business incubation program by doing what it takes to grow their business."
- **UtiliWorks client, Albuquerque Bernalillo County Water Utility Authority was awarded the Best Smart Infrastructure Project at CS Week 2013** in Tampa, FL. The Expanding Excellence Awards were announced on May 1, 2013 by CS Week and Electric Light & Power Magazine.
- **UtiliWorks was honored as the third place Company at the LSU 100: Fastest Growing Tiger Businesses (LSU 100) program**. The LSU 100 "identifies, recognizes and celebrates the 100 fastest growing LSU-owned or LSU-led businesses in the world." Todd Barlow, UtiliWorks VP/ Operations and Dale Pennington, UtiliWorks' Managing Director received the award on Friday April 26, 2013 at the Crowne Plaza Baton Rouge Hotel.
- **UtiliWorks Consulting's client, the City of San Marcos, TX, was awarded the Best Smart Infrastructure/Grid Project at CS Week** in Nashville, TN. The Expanding Excellence Awards were announced on May 27, 2010 by CS Week and Electric Light & Power Magazine.
- **UtiliWorks Consulting's client, the City of Ruston, won the Smart Grid Project of the Year by Utility Automation and Engineering T&D Magazine**, a division of PennWell Corporation. The awards were announced and distributed during the opening keynote ceremony for DistribuTech on March 23, 2010 in Tampa, Florida.
- **The Town of Danvers, MA was selected to receive approximately $8.5M from the DOE Smart Grid Investment Grants (2009)**. The federal stimulus funds will be allocated towards a program to deploy 12,000 smart meters for the full customer base, upgrade cyber security systems and automate outage management.
- **The City of Ruston, LA, received an SGIG award for $4.3 million late October, 2009**. Three major phases and overall program management services consists of engineering, design, planning, project management, cyber security, customer education and policy initiatives. The projects phases are Customer Information Systems, electric AMI system and MDM system, and electric distribution improvements.

© 2016 UtiliWorks Consulting, LLC

- **UtiliWorks Consulting's client, the city of San Marcos, TX, was awarded the AMI Project of the Year at Distributech 2009 by Utility Automation & Engineering T&D Magazine**.

B. <u>Speaking Engagements</u>

Our consultants are recognized for their thought leadership as they speak and write on a variety of relevant subjects in the utility sector.

- **UtiliWorks' Associate, Joe Gaspard served in a panel entitled "Smart Cities – Engaging & Serving Residents" as a part of the American Council for an Energy-Efficient Economy (ACEEE) Intelligent Efficiency Conference.** The event took place at the Westin Boston Waterfront Hotel from December 6 through December 8, 2015.
- **UtiliWorks' Principal, Kody Salem and Field Engineer/ Project Manager, Joe Kelly represented UtiliWorks as sponsors, presenters and exhibitors at the 2015 Rural Smart Grid Summit.** The event took place November 1-3, 2015 at the Omni Rancho Las Palmas Resort & Spa in Palm Springs, California.
- **UtiliWorks' Managing Director, Dale Pennington presented "Maximize Your AMI Investment: A Consultant's Guide" at the Sensus Reach 2015 conference on October 26, 2015.** The conference took place at the Renaissance Orlando SeaWorld in Orlando, FL.
- **UtiliWorks' Managing Director, Dale Pennington, and Principal, Kody Salem, represented UtiliWorks as sponsors, presenters and exhibitors at the 2015 Smart Water Summit (SWS).** The event was held from September 20 – 22, 2015 at Omni Rancho Las Palmas Resort & Spa in Palm Springs, CA.
- **UtiliWorks' Managing Director, Dale Pennington presented on the "Emerging U.S. Smart Grid Trends and Technologies" panel at the German American Smart Grid Symposium on** September 15, 2015 in Chicago, IL.
- **Mark Windus, Manager for UtiliWorks, presented "Smart Grid is Won or Lost in the Back Office" at CARILEC's Chief Executive Officers and Finance Conference** on May 20, 2015 in Punta Cana, Dominican Republic.
- **Dale Pennington, UtiliWorks' Managing Director spoke on "Smart Grid's Disruptive Technologies and the Potential Effects on a Utility's Pricing Structure" at CMRG 2015 on** May 19, 2015 in Roseville, CA.
- **Dale Pennington, UtiliWorks' Managing Director presented on "How to Be Drought-Resilient with a Smart Water Network" with Dan Pinney, Director of Global Water Marketing at Sensus. The complimentary UIM: Water Utility Infrastructure Management educational webinar occurred on June 24, 2015 at 2:00 p.m. EST.**
- **Dale Pennington, UtiliWorks' Managing Director spoke at the Advanced Metering Infrastructure Symposium sponsored by the Association of California Water Agencies.** The event took place in West Sacramento, CA on February 26, 2015. Dale presented on "Technology Evolution in Water Management."
- **David Shpigler, Principal for UtiliWorks presented "Developing Trends in Distributed Energy Resources " at TechAdvantage 2015 on Thursday February 26, 2015 at 10:30 a.m. Dale Pennington, UtiliWorks' Managing Director also presented at TechAdvantage.** His presentation was on "How to Implement a Pre-Pay System on Wednesday February 25, 2015 at 8:30 a.m. The conference and exhibition took place February 23-26, 2015 at the Orange County Center in Orlando, FL.

© 2016 UtiliWorks Consulting, LLC

- **Dale Pennington, UtiliWorks' Managing Director participated on a Water Utility Technology Panel Session titled "Transferring Asset Data to Operations" at Distributech 2015** on February 5, 2015 at 10:30 a.m. in Room 28E. The conference and exhibition took place February 2-5, 2015 at the San Diego Convention Center in San Diego, CA.
- **Dale Pennington, UtiliWorks' Managing Director spoke at EVOLVE: The 2014 Sensus Utility Conference.** Dale presented on "Water Infrastructure Management in an Era of Evolving Data Analytics" on November 3, 2014 at the Arizona Grand Resort in Phoenix, AZ.
- **UtiliWorks sponsored, presented and exhibited at the 2014 Municipal Smart Grid Summit. T**he event took place June 22-24, 2014 at Arizona Grand, Phoenix, AZ.
- **UtiliWorks presented at the Aclara Client Conference 2014** which took place in Orlando, FL from May 5-8, 2014. UtiliWorks presentation was titled "Water Infrastructure Management in an Era of Evolving Data Analytics."
- **Dale Pennington, UtiliWorks' Managing Director spoke at the Energy, Utility and Environmental Conference (EUEC) 2014** in Phoenix, AZ from February 3-5, 2014. Dale presented on Optimizing Renewable Projects, Plug-in Electric Vehicles, Home Area Networks and Tactics on Building a Smart Grid.
- **UtiliWorks participated on a Panel Session titled "Enterprise Information and Asset Management Track: Using AMI Data for Added Value Operational Solutions" at Distributech 2014** on January 28, 2014 at San Antonio, TX.
- **UtiliWorks exhibited and presented at the Harris Customer Training Conference** on October 30 – November 01, 2013 in Gaylord Palms, FL. The presentation focused on next generation Smart Metering and what to do to maximize the benefits of Smart Metering.
- **UtiliWorks with Synaptitude Consulting** sponsored, presented and exhibited at the **2013 Rural Smart Grid Summit** (October 2013) and 2013 **Municipal Smart Grid Summit** (June 2013).
- **Dale Pennington, UtiliWorks' Managing Director spoke** on "Utility Case Study: Brownsville Public Utility Board" at the **EUCI Volt/VAR Optimization Conference** in June 2013.
- **Dale Pennington, UtiliWorks' Managing Director spoke at the Municipal Electric Power Association of Virginia (MEPAV)** conference on Wednesday May 22, 2013 in Virginia Beach, VA. Dale presented on "Advanced Metering Infrastructure (AMI) Update."
- **UtiliWorks presented at the 2013 NRECA Tech Advantage Conference with Synaptitude** on Tuesday February 19, 2013 in New Orleans, LA. The session was titled "Smart Grid is Won or Lost in the Back Office."
- **Dale Pennington, UtiliWorks Managing Director spoke on a panel at Distributech 2013** in San Diego, CA. The session on January 29th was titled "A Consultant's Guide to the Smart Water Network Lifecycle."
- **UtiliWorks sponsored, presented and exhibited at the 2012 Rural Smart Grid Summit** with Synaptitude Consulting. The event took place October 28-31, 2012 at the Rancho Bernardo Inn in San Diego, CA.
- **UtiliWorks presented at Harris North Star's Customer Conference** on November 7, 2012 in Nashville, TN. The session was titled "doing more with less: Gearing Meter Data Management for the Smart Infrastructure Journey."

 © 2016 UtiliWorks Consulting, LLC

- **UtiliWorks presented with Synaptitude at Utilimetrics' Autovation 2012** in Long Beach, CA on Wednesday October 3, 2012. The presentation was titled "Lessons Learned Implementing AMI in Muni's and Coop's."

© 2016 UtiliWorks Consulting, LLC