



TOWN COUNCIL WORK SESSION

Tuesday, July 5, 2016 @ 7:00pm

Front Royal Administration Building

Town/Staff Related Issues:

1. Continued Discussion of Solid Waste – *Director of Environmental Services*
2. Recommendation on RFP for General Engineering Services – *Director of Energy Services*
3. Recommendation on RFP for Power Supply Consulting Services – *Director of Energy Services*
4. Town Health Insurance RFP Discussion – *Town Attorney*
5. Request to Change Street Name – CBM Mortgage – *Town Manager*

Council/Mayor Related Items

6. Liaison Committee Meeting Items for July 21
7. Planning Commission Term Expires
8. Council Discussion/Goals (*time permitting*)
9. Closed Meeting – Performance of Town Manager; Disposition of Publicly held Property; and Investment of Public Funds

Motion to Go Into Closed Meeting

I move that Council convene and go into Closed Meeting for the purpose of **1)** assignment, appointment, promotion, performance, demotion, salaries, disciplining, or resignation of specific public officers, appointees, or employees of a public body, pursuant to Section 2.2-3711. A. 1. of the Code of Virginia; **2)** Discussion or consideration of the disposition of publicly held real property, specifically, the former Afton Inn property, where discussion in an open meeting would adversely affect the bargaining position or negotiating strategy of the public body, pursuant to Section 2.2-3711. A.3., of the Code of Virginia and **3)** the purpose of discussion or consideration of the investment of public funds, regarding the Town's possible participation in the Economic Development Authority-sponsored People Inc. New Market Tax Credit investor(s) financial investment transactions funds and loans, where competition or bargaining is involved, where, if made public initially, the financial interest of the governmental unit would be adversely affected, pursuant to Section 2.2-3711. A. 6. of the Code of Virginia.

Motion to Certify Closed Meeting at its Conclusion [*At the conclusion of the Closed Meeting, immediately re-convene in open meeting and take a roll call vote on the following:*]

I move that Council certify that to the best of each member's knowledge, as recognized by each Council member's affirmative vote, that only such public business matters lawfully exempted from Open Meeting requirements under the Virginia Freedom of Information Act as were identified in the motion by which the Closed Meeting was convened were heard, discussed or considered in the Closed Meeting by Council, and that the vote of each individual member of Council be taken by roll call and recorded and included in the minutes of the meeting of Town Council

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Item No. ____1____

Town of Front Royal, Virginia Work Session Agenda Form

Date: July 5, 2016

Agenda Item: Continued Discussion of Solid Waste

Summary: Information will be provided to Council at the work session

Council Discussion: Council takes desired action

Staff Evaluation: Staff will be presenting

Budget/Funding: N/A

Legal Evaluation: Town Attorney will be available

Staff Recommendations: Staff will be available

Town Manager Recommendation: Town Manager will be available

Council Recommendation:

☐ Additional Work Session ☐ Regular Meeting ☐ No Action

Consensus Poll on Action: ____ (Aye) ____ (Nay)

Work Session

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Town of Front Royal, Virginia Work Session Agenda Form

Date: July 5, 2016

Agenda Item: Recommendation on RFP for General Engineering Services

Summary: The Town issued a request for proposals for general engineering services to support the Energy Services department. This will require a full range of engineering, design and construction administration consulting services that cannot be provided by Town personnel.

Council Discussion:

Staff Evaluation: The Town received four proposals from the RFP for engineering services and they were evaluated on the following evaluation matrix: experience of the firm, experience and qualifications of individuals assigned to the project and successful experience in performing similar work. Staff then selected the top two firms and conducted informal interviews to evaluate their qualifications and bid responses in more detail.

Budget/Funding: FY16-17 budget - expense line 9401- 3021

Legal Evaluation:

Staff Recommendations: Staff recommends award of contract with Southeastern Consulting to provide the Town with general engineering services to support the Energy Services department. Southeastern Consulting was selected based upon the evaluation criteria and excellent services provided to the Town over the past 30 years.

Town Manager Recommendation:

Council Recommendation:

☐ Additional Work Session ☐ Regular Meeting ☐ No Action

Consensus Poll on Action: ____ (Aye) ____ (Nay)



PROFESSIONAL ELECTRICAL ENGINEERING SERVICES TOWN OF FRONT ROYAL, VA

May 6, 2016





Mrs. Cynthia Hartman
Purchasing Agent
Town of Front Royal
P. O. Box 1560
Front Royal, Virginia 22630

Dear Mrs. Hartman:

We are pleased to submit a proposal for providing professional electrical engineering services to assist the Town of Front Royal, Department of Energy Services. Southeastern Consulting Engineers, Inc. is a firm whose combination of experience and personnel will provide timely, cost-effective and quality professional services to support the Department of Energy Services. Our chief business and specialty are services for municipal electric systems and we uniquely understand most facets of the challenges these clients face.

Southeastern Consulting Engineers, Inc. was founded in 1961 and has been serving the electrical engineering needs of our clients, in varying degrees, since 1964. All of our operations are carried out from one centrally located office in Charlotte, North Carolina.

Southeastern is a private practice organization, established solely for the performance of electrical engineering services. The firm presently consists of ten employees, including five Professional Engineers registered in the following states to perform electrical engineering in North Carolina, South Carolina, and Virginia; two engineering interns; one CAD technician; one accountant; and an office manager.

Southeastern's core engineering expertise includes the design of substations, peak/standby generation, distribution and transmission lines, as well as performing numerous arc flash, planning, and coordination studies for municipal electric, water, and wastewater utilities.

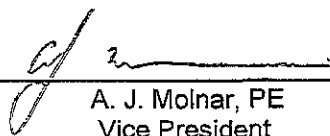
Southeastern is uniquely qualified to assist the Town, as needed, with day to day operations as well as providing design services for major projects because of our project team's extensive experience and technical expertise in performing this type of work and our knowledge of Municipal Electric Distribution Systems.

We thank you for allowing us the opportunity to submit our qualifications and project history to the Town of Front Royal. Please do not hesitate to contact us if you require any additional information.

Sincerely,

SOUTHEASTERN CONSULTING ENGINEERS, INC.

By


A. J. Molnar, PE
Vice President



Corporate Goal

We are a progressive, client-oriented engineering consulting firm. Our goal is to provide the knowledge, skills, experience, and resources required to meet our clients' needs in defining and fulfilling their objectives. Our standards of conduct are integrity, professional competence, and economy in engineering services.



DESCRIPTION OF FIRM

Southeastern Consulting Engineer, Inc. (Southeastern) was founded in January, 1961, and has specialized in serving the needs of municipal, industrial, and institutional electric systems for over 50 years.

We are a progressive, client-oriented engineering consulting firm. Our goal is to provide the knowledge, skills, experience, and facilities required to meet our client's needs in defining and fulfilling their objectives. Our standards of conduct are integrity, professional competence, and economy in engineering services.

Southeastern presently serves clients in the Southeast, located in North Carolina, South Carolina, and Virginia. All operations are carried out from one centrally located office in Charlotte, North Carolina.

Southeastern is a private practice organization, established solely for the performance of engineering services, and has not proprietary interest in construction or sales. The firm presently consists of 10 employees, including five Professional Engineers, two Associate Engineers, One AutoCAD technician, one Office Manager, and one Bookkeeper.

The five professional engineers on our staff hold registration in Virginia, North Carolina, and South Carolina, with various individuals each holding from one to three state registrations. The professional engineers also hold NCEES records which allow for quick registration in other states should opportunities arise. All professional personnel are electrical by specialty.

SERVICES

Southeastern offers a complete range of engineering services for electric supply and distribution systems, and limited services to water, waste collection, and gas systems.

List of Services

System Study & Planning

- Ten Year Capital Improvement Plans
- Power Supply and Load Forecasting
- Load Flow Analysis
- Fault Analysis
- Power Factor Improvement
- Overcurrent Coordination
- System Reliability
- Generation Feasibilities
- Arc Flash Hazard Analysis

Customer Services

- Power Audits
- Service Reviews
- Rate Options
- Customer Seminars
- Distribution System Mapping

Construction Design & Inspections

- Substations
- Transmission Lines
- Distribution Lines
- SCADA and Load Management
- Peak/Standby Generation, Distributed & Power Parks
- Underground Distribution
- Roadway Lighting
- Highway Relocations
- Metering
- Railroad Crossings
- Large Industrial Services

OPERATIONS

Where practical, all projects commissioned by a single client are managed by the same engineer, in order to minimize the time and expense of job familiarization.

We feel this method of project assignment also provides more convenient and efficient communication as the client generally can call one person who can readily answer even detailed questions concerning current or past projects.

However, this does not preclude our design engineers from sharing new ideas or discussing possible solutions to project requirements in order to take full advantage of our collective knowledge and experience.

This open exchange of ideas also leads to standardization of methods and procedures which allows all of the firm's engineers to be familiar with the basics of each project, thereby providing continuity and efficiency.

QUALITY CONTROL

The majority of employees at Southeastern participate in ownership of the company. This ownership produces a personal interest for each employee in the quality of our service, and encourages a primary dedication to the client's interest.

Furthermore, all work is performed by or under the direct supervision of a professional engineer and is reviewed and sealed by the project engineer prior to release.

Work may be reviewed by other engineers as deemed necessary, but it is the sole-source responsibility and accountability of the project engineer that forms the basis of our quality assurance.

CORPORATE OFFICERS

Michael C. Dougherty, PE
Alexander J. Molnar, PE
Jerry L. Ford, Jr., PE
Jeremy R. Furr, PE

President
Vice President
Treasurer
Secretary

CONTACT INFORMATION

SOUTHEASTERN CONSULTING ENGINEERS, INC

600 Minuet Lane, Charlotte, NC 28601 • Phone: 704.523.6045 • Fax: 704.523.8317
www.scepower.com

STATEMENT OF QUALIFICATIONS

GENERAL

Southeastern's scope of services is primarily defined by who we work for. We are here to assist our clients with practically any challenge they encounter with their electric system. That desire to assist has led us to projects large and small, from basic questions to multi-million dollar substations, our journey takes us through many projects common to most and to others we never expected. Southeastern provides the wisdom and knowledge to design very complex projects and the hands on experience to assist with very practical trouble shooting in the field.

SUBSTATION DESIGN

Southeastern has provided design, specification, and construction design services for electric power substations of various types. These include industrial substations up to 200,000 KVA and 13.2 KV; utility transmission substations up to 75,000 KVA and 230 KV primary; and utility distribution substations up to 100,000 KVA and 230 KV primary. Substation types have included conventional and metalclad, with overhead and underground connections.

Substation designs have included protective relay systems as required or indicated. The use of overcurrent, bus differential, transformer differential, sudden pressure, and thermal relaying equipment has been involved in many designs. Relay coordination services, including setting calculations, field testing, and relay calibration are provided as required.

TRANSMISSION AND DISTRIBUTION LINES

Southeastern has provided design of electric transmission lines in all standard voltages from 24 KV to 115 KV inclusive. The construction projects have included pintype, line post, and suspension insulator designs as required by the individual project conditions. Ground clearance, structure placement, and attachment heights have been calculated by plan and profile sheets, and computerized strength analyses have been provided for individual structures. Unguyed steel or concrete poles have been included as required in line designs up to 115 KV.

Southeastern has also provided design services for many electric distribution line projects ranging from 2.4 KV to 34.5 KV. These projects have included both overhead and underground construction, and have involved conversion under energized conditions, as well as new line construction. If highway or railroad encroachments are required, Southeastern will complete necessary applications on behalf of the client.

All construction designs have normally included complete listings of the installation units for each pole or other structure. Sag and tension data are also provided for installation of overhead conductors. Contracts can be structured to best utilize the resources of the contractor and the client. Southeastern provides project inspection as needed that can include detailed payment approval recommendations and complete project close out.

SUPERVISORY MONITORING AND CONTROL

Southeastern has provided design, construction supervision, installation assistance, data base preparation and system debugging and maintenance for supervisory monitoring and control systems for electric, water, wastewater and gas utility systems.

All systems have been designed to provide easy expansion of additional facilities master station replacement or other utilities.

All systems have automatic report generators and report schedules.

Individual systems will normally include from one to ten remote terminal units, plus mini-remotes. Each standard remote terminal unit may involve up to 1000 monitoring and control connections, in addition to the redesign and modification of control circuits in existing equipment such as regulators and circuit breakers.

ELECTRIC POWER SYSTEM ANALYSIS

Southeastern provides expertise and subscribes to various software to assist with technical calculations when required for planning, interaction with neighboring power companies, or customer requests. Some of the data available are:

- Analysis of Existing Systems
- Analysis of System Interconnections
- Determine requirements for expanding and/or upgrading existing system
- Power Supply and Delivery
- Load Forecasting
- Load Flow
- Line Routing
- Fault Analysis
- Relay and Fuse Coordination
- System Voltage Drop
- Voltage Conversion
- Voltage Control
- Capacitor Placement
- Generation Feasibility
- Supervisory Control and Data Acquisition Feasibility Load Management Feasibility
- System Betterment
- System Maintenance
- System Losses
- Economic Conductor Loading
- Arc Flash Analysis

Southeastern prepares a formal report of the studies performed and makes presentations to the Owner or other governing bodies as required.

STANDBY AND PEAKING GENERATION

Southeastern has designed peak shaving and emergency generation facilities for electric utilities as well as water and wastewater treatment facilities. Projects have been designed using individual units rated from 30 KW to 2200 KW. Total project capacities range up to 24,000 KW, and all major projects have been designed for fully automated operation.

All designs included building or housing facilities, fuel storage, foundation design, control, and monitoring.

When applicable, fire suppression and utility interconnection requirements were also included.

MISCELLANEOUS SERVICES

Southeastern has established miscellaneous services contracts with all of its clients. A miscellaneous services contract is an Agreement between the Engineer and the client whereby, when a need for miscellaneous engineering services arises, the client can request, and receive, service in a timely manner.

Southeastern has performed engineering services for many clients under the miscellaneous services contract. The following is a list of typical projects and analyses performed in this manner.

- Distribution System Mapping
- Motor Starting Analyses
- Load Growth Analyses
- Power Transformer Analyses
- SCADA Feasibility Analyses
- Surveying for Equipment Installations
- Load Management Economic Feasibility Analyses
- Relay Coordination
- Equipment Maintenance Specifications
- Construction Equipment Specifications
- Industrial Substation Design
- Joint-Use Agreements
- Material Specifications
- Gas, Water and Electric Rate Revisions
- Construction Inspection
- System Appraisals
- Expert Testimony
- Oil Spill Containment and Countermeasure Plans

EVIDENCE OF AVAILABILITY TO DELIVERY ON TIME

The nature of the clientele of Southeastern Consulting Engineers, Inc. requires that we handle multiple projects of varying degrees of complexity and involvement at a time. We will dedicate staff as required to complete per the Town's schedule. Our reputation for complete, professional, and timely work over the past 55 years provides a steady stream of work in good economic times and bad. The work required for Front Royal will easily fit into our schedules.

PARTIAL LIST OF CURRENT AND RECENT PROJECTS

Abbeville, SC

Raw Water Generation Grant
System Review
New 4 kV Water Plant Feeder
SCADA Master Station Design

Albemarle, NC

Tuckertown Arc Flash Updates
Hwy. 24/27 DOT Widening

Camden, SC

Lyttleton UG Relocation
Fair Street UG Relocation
Mast Arm Traffic Signals
Kendall Mill Village Underground
SCDOT Truck Improvements
Steeplechase and Beaufort Generators
City Hall Arc Flash Study

Charlotte (NC) Water

Mallard Electrical Review
McAlpine CHP Interconnect
Generator Emissions & Doc Monitoring
Lee Dukes Power Line Inspection

Cherryville, NC

Little League Field Lighting

Clinton, SC

Highway 56 & 72 Tie Line

Concord, NC

Substation H Design
International Drive Duct Bank
I-85 NCDOT Bridge Project
Delivery 2 Relay Upgrade

Cornelius, NC

SCADA RTU Commissioning
Estimate to Upgrade Substation

Electricities of NC

Monroe CT Plant Arc Flash Update
Gastonia Power Park Expansion

Forest City, NC

Arc Flash Update

Front Royal, VA

SCADA Master Relocation
System Study and Work Plan
Leach Run Parkway Distribution Design

Gastonia, NC

Gastonia Tech Park Relay Upgrade
NCDOT Project Line Relocation
Gastonia Tech Park Substation
Arc Flash Updates

Gaffney, (SC) BPW

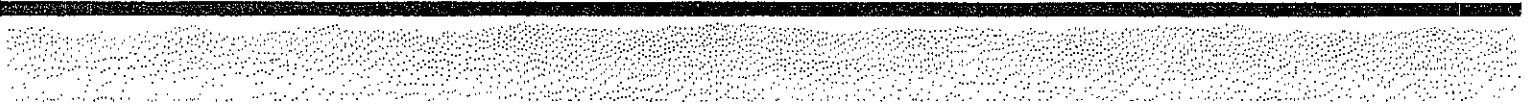
Suez Delivery Improvements
GDS/Willow Substation Improvements
Union Substation Improvements
SCADA Troubleshooting

High Point, NC

Linden Substation Relay Panel
Arc Flash Update
Russell Substation Upgrades

Huntersville, NC

Commerce Substation
Southwire Plant Expansion
Pactiv Plant Expansion



Landis, NC

System Map Updates

Lexington, NC

Greensboro Street NCDOT Relocation
Hwy. 150 Substation Relay Panel Upgrade
E. Center Street NCDOT Bridge Project
Arc Flash Study Updates

Lincolnton, NC

Hwy. 321 & 150 Intersection UG

Morganton, NC

Delivery 3 Relay Upgrade
Delivery 1 Ground Grid
Industrial Substation Upgrades

New River Light & Power, Boone, NC

SCADA – ODA Implementation

Newton, NC

Jacob's Fork Phase II Estimate
SCADA Assistance
Hwy. 10 Lift Station Arc Flash

Pineville, NC

System Map Updates
Dover Street Substation Relocation
Caroline Place Mall Cable Failures

Rock Hill, SC

Riverwalk Substation
Blackmon Substation Rebuild
Huey Road Substation Rebuild
Air Quality Permitting
Oil Spill Containment Plans

(Resumes for Key Staff Members)



Michael C. Dougherty, PE

President

Mike has 27 years of experience in providing expertise in electrical engineering for municipal electric, water, and wastewater clients as well as investor owned utilities. Mike has extensive experience in all facets of water/wastewater electric system design, peak shaving and standby generation design, permitting, and project management. He is also knowledgeable in preparing technical specifications and construction bid packages as well as construction administration and inspection. Mike also has experience as the lead design professional on multi-discipline projects.

With his wealth of electrical engineering experience, Mike is used to taking on and resolving complex design issues, while bringing the projects to completion on time

and within budget.

EDUCATION:

Bachelor of Science Degree in Electrical Engineering, 1988
North Carolina State University, Raleigh, North Carolina

PROFESSIONAL REGISTRATION:

North Carolina	Professional Engineer, #18918
South Carolina	Professional Engineer, #19197
Virginia	Professional Engineer, #04506

PROFESSIONAL ASSOCIATIONS:

Member of National Society of Professional Engineers of North Carolina

PROFESSIONAL BACKGROUND:

2009 - Present	President - Southeastern Consulting Engineers, Inc. Charlotte, North Carolina
1988 to 2009	Design Engineer - Southeastern Consulting Engineers, Inc. Charlotte, North Carolina
1986 to 1988	Student Engineer, Duke Power Company Winston-Salem & Charlotte, North Carolina

Work Experience - General

- Project administration and management.
- Design and Construction Administration/Inspection of Standby/Peak generation facilities
- Design and Construction Administration/Inspection of Electrical Substations.
- Design and Construction Administration/Inspection of Water/Wastewater Peak Shaving and Standby generation projects.
- Design and Construction Administration/Inspection of Water/Wastewater pump station electrical projects.
- Design and installation of SCADA systems providing metering, status monitoring, and remote control of electric distribution systems.
- Perform generator peak shaving feasibility analyses, loss evaluation, and investment-making analyses.
- Perform arc flash analyses for Municipal Electric, Water, Wastewater, and private sector electrical systems.
- Design and Construction Administration/Inspection of electrical equipment installation including, switchgear, Motor Control Centers, Automatic Transfer Switches, Motor starters, etc.



A.J. Molnar, IV, PE

Vice President

AJ has 24 years of experience in providing expertise in electrical engineering for municipal electric, water, and wastewater clients as well as investor owned utilities. AJ is also knowledgeable in preparing technical specifications and construction bid packages as well as construction administration and inspection. A.J. has also served as an expert witness in legal matters on behalf of Southeastern's municipal clients.

With his wealth of electrical engineering experience, AJ is used to taking on and resolving complex design issues, while bringing the projects to completion on time and with budget.

EDUCATION:

B.S.E.E. NC State University, 1991

MBA Pfeiffer University, 2004

PROFESSIONAL REGISTRATION:

North Carolina

Professional Engineer, #22048

South Carolina

Professional Engineer, #18985

Virginia

Professional Engineer, #035673

PROFESSIONAL ASSOCIATIONS:

Member of Institute of Electrical and Electronic Engineers

PROFESSIONAL BACKGROUND:

2009 - Present

Vice President/Secretary - Southeastern Consulting Engineers, Inc.
Charlotte, North Carolina

1991 to 2009

Design Engineer - Southeastern Consulting Engineers, Inc.
Charlotte, North Carolina

1987 to 1990

Student Engineer, Duke Power Company
Charlotte, North Carolina

Work Experience - General

- Project administration and management.
- Analysis, planning, design, and construction of electrical distribution systems.
- Electrical distribution consultant for municipalities and large industrials in NC, SC, and VA with distribution voltages of 4.16 KV to 44 KV and demands of 4 MW to 160 MW.
- Design a broad range of engineering services for assigned clients including system analysis, long-range system planning and budgeting, detailed design of system improvements and expansions, and construction inspection.
- Design and construction included substations, switching stations, overhead distribution lines, complete underground systems, and control systems;
- Performed system studies, power factor improvements studies, loss evaluation, and investment decision-making analyses.
- Substation design, relay coordination and setting, peak generation system design, load management systems, preparation of cost estimates, bid documents and construction contracts, and inspection of power generation and delivery construction.



Jerry L. Ford, Jr., PE

Project Engineer/Manager

Jerry has over 15 years of experience in providing expertise in electrical engineering for municipal electric utilities. Jerry has extensive experience in all facets of substation design, peak shaving and standby generation design, relay programming, and project management. He is also knowledgeable in preparing technical specifications and construction bid packages as well as construction administration and inspection.

With his electrical engineering experience, Jerry is used to taking on and resolving complex design issues, while bringing the projects to completion on time and within budget.

EDUCATION:

Bachelor of Science Degree in Electrical Engineering, 2000
North Carolina State University, Raleigh, North Carolina

PROFESSIONAL REGISTRATION:

North Carolina Professional Engineer, #30394
South Carolina Professional Engineer, #29365

PROFESSIONAL BACKGROUND:

2012 – Present: Senior Design Engineer/Corporate Secretary – Southeastern Consulting Engineers, Inc.
Charlotte, North Carolina

2004 – 2012: Design Engineer – Southeastern Consulting Engineers, Inc.
Charlotte, North Carolina

2000 – 2004 Associate Engineer – Southeastern Consulting Engineers, Inc.
Charlotte, North Carolina

Work Experience - General

- Project Administration and Management.
- Design and Construction Administration/Inspection of Electrical Substations.
- Design and Construction Administration/Inspection of Standby/Peaking Generation.
- Analysis, Planning, and Design of Electrical Distribution Systems.
- Preparation of Cost Estimates, Bid Documents, Construction Contracts, Distribution System Mapping, System Studies
- Programming and Commissioning of Substation Relays, Reclosers, and Switchgear.
- NERC/SERC Regulatory Compliance Programs
- Arc Flash Analysis
- Power Factor Improvement Studies
- Transmission Line Design – Overhead and Underground
- Construction Inspection of Substations, Generators, Distribution and Transmission Lines.
- Protective Device Coordination Studies
- Power Quality Troubleshooting and Analysis
- Proficient in Multiple Engineering Analysis Software Programs including SynerGEE, Milsoft, and SKM, Inc.



Jeremy R. Furr, PE

Design Engineer

Jeremy has 12 years of experience in providing expertise in electrical engineering for municipal electric utilities. Jeremy has extensive experience in all facets of substation design, SCADA systems, standby generation design, relay programming, and distribution line design. He is also knowledgeable in preparing technical specifications and construction bid packages as well as construction administration and inspection.

EDUCATION:

Bachelor of Science Degree in Electrical Engineering, 2000
North Carolina State University, Raleigh, North Carolina

PROFESSIONAL REGISTRATION:

North Carolina	Professional Engineer, #30871
South Carolina	Professional Engineer, #30562

PROFESSIONAL BACKGROUND:

2005 – Present:	Design Engineer – Southeastern Consulting Engineers, Inc. Charlotte, North Carolina
2002 – 2005:	Associate Engineer – Southeastern Consulting Engineers, Inc. Charlotte, North Carolina
2000 – 2001	Systems Engineer – Nortel Networks Alpharetta, Georgia

Work Experience - General

- Design and Construction Administration/Inspection of Electrical Substations.
- Design and Construction Administration/Inspection of Standby/Peaking Generation.
- Analysis, Planning, and Design of Electrical Distribution Systems.
- Preparation of Cost Estimates, Bid Documents, Construction Contracts, Distribution System Mapping, System Studies
- Programming and Commissioning of Substation Relays, Reclosers, and Switchgear.
- SCADA Programming
- Substation Troubleshooting
- Fiber Communications Design
- Transmission Line Design
- Construction Inspection of Substations, Generators, Distribution and Transmission Lines.
- Protective Device Coordination Studies

ORGANIZATIONAL CHART

Engineering Personnel for Front Royal Projects



A.J. Molnar, P.E., MBA

Vice President

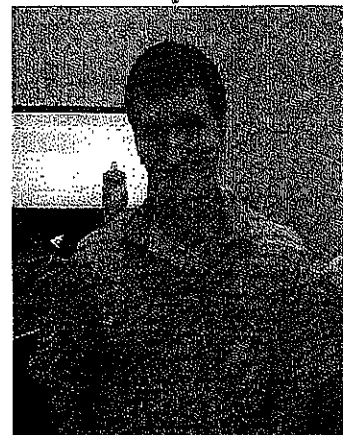
Manager & Final



Jeremy Furr, PE

Project Design Engineer

• Project Manager



Kevin Smorgala

Assistant Engineer

LIST OF REFERENCES FOR LEAD ENGINEERS

Client	Years of Association	Engineer	Contact Person
City of Abbeville 306 Cambridge Street Abbeville, SC 29620 864-366-4518	40	MCD	Mark Hall, Interim Utilities Director
City of Albemarle P. O. Box 190 Albemarle, NC 28002 704-984-9608	50+	JRF	Judy Redwine, Director of Public Works
City of Camden P. O. Box 7002 Camden, SC 29020 803-425-6045	25	AJM	Tom Couch, Director of Public Works
City of Charlotte 5100 Brookshire Boulevard Charlotte, NC 28216 704-399-2551	13	MCD	Arnold Jarrell, Project Manager
City of Cherryville 116 South Mountain Street Cherryville, NC 28021 704-435-1737	50+	AJM	Brandon Abernathy, Public Works Director
City of Clinton P.O. Box 507 Clinton, SC 29325 864-833-7520	22	MCD	Kevin Snelgrove, Electrical Supervisor
City of Concord P. O. Box 308 Concord, NC 28026 704-920-5301	50+	JLF	Bob Pate, Electric Systems Director
Town of Cornelius P. O. Box 2819 Huntersville, NC 28070 704-948-0550	50+	AJM	Kathy Moyer, Electric Systems Manager

REFERENCES (CONTINUED)

Client	Years of Association	Engineer	Contact Person
ElectriCities of N.C. P. O. Box 29513 Raleigh, NC 27626 919-561-1931	20	MCD	Andy Fusco, VP Member Services and Corporate Planning
Town of Forest City P. O. Box 728 Forest City, NC 28043 828-245-0149	50+	JLF	Barry Spurlin, Electric Superintendent
Town of Front Royal P. O. Box 1560 Front Royal, VA 22630 540-635-3027	50+	AJM	Joe Waltz, Director of Energy Resources
City of Gastonia P. O. Box 1748 Gastonia, NC 28053 704-866-6803	50+	JLF, MCD, JRF	Ron Gaff, Engineering, Manager
City of High Point 816 E. Green Drive High Point, NC 27260 336-883-3485	11	JLF, MCD	Garey Edwards, Electric Director
Town of Huntersville P. O. Box 2819 Huntersville, NC 28070 704-948-0550	50+	AJM	Kathy Moyer, Electric System Manager
Town of Landis P.O. Box 165 Landis, NC 28088 704-857-0131	50+	AJM	Ron Miller, Director of Public Works
City of Lexington 28 W. Center Street Lexington, NC 27292 336-243-2489	50+	JRF	Randy Norris, Electric Operations Superintendent
City of Lincolnton P. O. Box 617 Lincolnton, NC 28093 704-736-8940	35+	MCD	Steve Peeler, Director of Public Works and Utilities

REFERENCES (CONTINUED)

Client	Years of Association	Engineer	Contact Person
City of Martinsville P. O. Box 1112 Martinsville, VA 24114 540-656-5184	50+	AJM	Durwin Joyce, Electric Department Director
City of Morganton P. O. Box 3448 Morganton, NC 28680 828-438-5284	5	AJM	Brooks Kirby, Electric Services Director
New River Light & Power P. O. Box 1130 Boone, NC 28607 828-264-1444	50+	MCD	Ed Miller, General Manager
City of Newton P. O. Drawer 550 Newton, NC 28658 828-695-4310	50+	MCD, JLF	Doug Wesson, Electric Director
City of Rock Hill P.O. Box 11706 Rock Hill, SC 29730 803-329-5518	50+	AJM, JRF	Jimmy Bagley, Assistant City Manager
Town of Winnsboro P. O. Box 209 Winnsboro, SC 29180 803-815-2342	30	AJM	William Medlin, Electrical Director

ENGINEER KEY

MCD – Michael C. Dougherty, P.E.
AJM – A.J. Molnar, P.E.

JLF – Jerry L. Ford, P.E.
JRF – Jeremy R. Furr, PE



Southeastern Consulting Engineers, Inc.

Schedule of Rates for Engineering Services

Effective July Billing 2015

<u>Name</u>	<u>Title</u>	<u>Hourly Rate</u>
M. C. Dougherty, P.E.	Principal Design Engineer	\$152.00
A. J. Molnar, P.E.	Principal Design Engineer	142.00
J. L. Ford, Jr., P.E.	Design Engineer	120.00
J. R. Furr, P.E.	Design Engineer	116.00
D. A. Nichols, P.E.	Design Engineer	104.00
M.J. Podbesek, P.E.	Design Engineer	96.00
K.J. Smorgala	Associate Engineer	85.00
M.S. McCoy	Associate Engineer	81.00
	Co-op Engineer	61.00
E. K. Nivens	CAD Technician	74.00
L. R. Cloud	Office Manager	71.00
A. Howard	Accountant	64.00
	CAD Workstation	10.00

NOTES:

1. An amount equal to 7% of the billed hourly charges will be billed for in house office expenses incurred in the performance of project related services to include photocopying, mailing costs, computer software and other miscellaneous office supplies.
2. Transportation, subsistence, lodging, printing and associated expenses will be added at cost. Mileage will be billed at the current standard IRS rate.
3. Charges for specialized consultants and equipment will be billed at cost.
4. The preceding schedule of rates is subject to annual review and adjustment.
5. Invoices are billed monthly. Terms of payment is net 10 days.

3



Town of Front Royal, Virginia Work Session Agenda Form

Date: July 5, 2016

Agenda Item: Recommendation on RFP for Power Supply Consulting Services

Summary: The Town issued a request for proposals for power supply consulting services related to the monthly review of the Town's wholesale power invoices and additional services related to power supply as requested during the term of the contract.

Council Discussion:

Staff Evaluation: The Town received three proposals from the RFP for consulting services and they were evaluated on the following evaluation matrix: Experience of the firm, experience and qualifications of individuals assigned to the project, hourly rates, comparable jobs performed and basic monthly review of power bills.

Budget/Funding: FY16-17 budget - expense line 9401- 3023

Legal Evaluation:

Staff Recommendations: Staff recommends award of contract with GDS Associates to provide Power Supply Consulting Services for the Town. GDS was selected based upon the evaluation criteria and excellent services provided to the Town over the past 10 years.

Town Manager Recommendation:

Council Recommendation:

☐ Additional Work Session ☐ Regular Meeting ☐ No Action

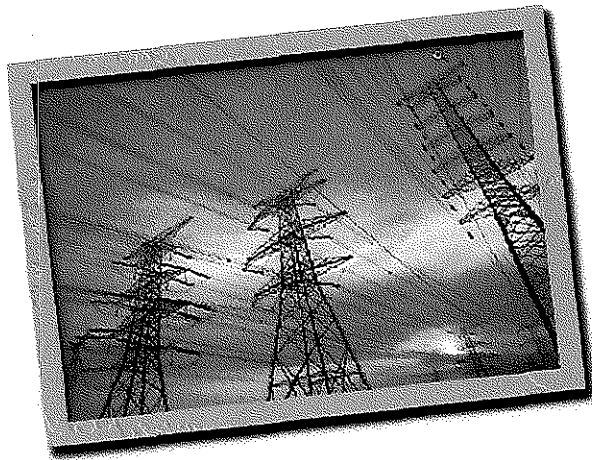
Consensus Poll on Action: ____ (Aye) ____ (Nay)



GDS ASSOCIATES, INC.

engineers and consultants

Power Supply Consulting Services



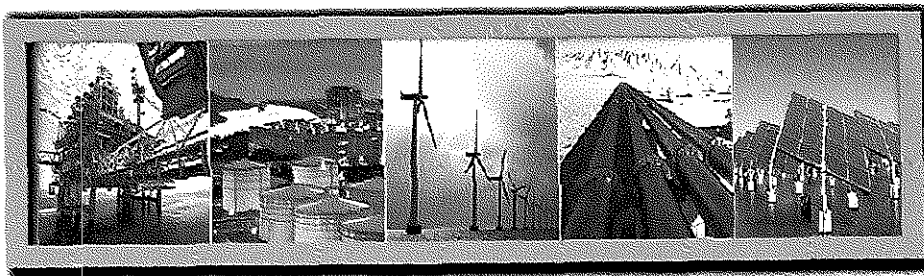
Proposal Prepared For:

**The Town of
Front Royal**

Prepared By:

GDS Associates, Inc.

1850 Parkway Place, Suite 800
Marietta, Georgia 30067
770.425.8100 / 770.426.0303 fax
www.gdsassociates.com



June 9, 2016



Garrett D. Cole, P.E.
Principal – Power Supply Services

GDS Associates, Inc.
Engineers and Consultants

Ph: 770.425.8100
Fax: 770.426.0303
garrett.cole@gdsassociates.com

June 9, 2016

Mr. Joe Waltz
Director of Energy Services
520A E. 6th Street
P.O. Box 1560
Front Royal, VA 22630
Phone: (540) 635-3027
E-mail: jwaltz@frontroyalva.com

Dear Mr. Waltz:

GDS Associates, Inc. ("GDS") appreciates the opportunity to submit this proposal to the Town of Front Royal to provide power supply consulting services. GDS has assembled a highly experienced project team to complete the scope of work for this project.

GDS provides engineering and consulting services to clients around the country, covering a broad range of services in the areas of strategic planning, power supply planning, transmission access and deliverability, contract negotiations, risk management services, regulatory/legislative industry issues, wholesale and retail rates, generation development and monitoring, demand-side management, and others.

GDS has examined all parts of the RFP including the submittal requirements and the scope of services. As outlined in this proposal, GDS is well positioned to assist and support Front Royal's power supply planning efforts and we hope that GDS will be selected to assist Front Royal in this effort.

The GDS Team would be pleased to address any questions or concerns about our proposal. I will serve as the single point of contact for further communication regarding the following GDS Qualifications Statement. My e-mail address and telephone number are provided above. Thank you again for this opportunity and we look forward to hearing from you.

Sincerely,

Garrett D. Cole, P.E.
Principal

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1. GDS BACKGROUND AND SERVICES OFFERED



GDS is a multi-service consulting and engineering firm formed in 1986 which now employs more than 170 employees in seven locations across the U.S. Our consultants are recognized leaders in their respective fields, dedicated to their clients, innovative in their approach to meeting unique challenges, and known for consistently being prepared and available when needed. Our broad range of expertise focuses on clients associated with, or affected by, electric, gas, water and wastewater utilities. In addition, we offer information technology, market research, and statistical services to a diverse client base.

Our Mission

Help our clients succeed by anticipating and understanding their needs and by efficiently delivering quality services with confidence and integrity.

POWER SUPPLY PLANNING AND INTEGRATED RESOURCE PLANNING SERVICES

Securing adequate and reliable energy resources is crucial to thriving in a more competitive electric market. GDS has helped guide its clients through uncharted territory by providing power supply portfolio, integrated resource planning, transmission planning and reliability assessments, load forecasting, financial, wholesale and retail rate-making and competitive analysis services.

GENERATION SERVICES

Greater competition has made effective control of power generation costs increasingly important. Over a span of almost 30 years, GDS has helped numerous power plant owners, co-owners and non-utility generators reduce costs and achieve improved performance by identifying inefficiencies in power plant construction, operation and maintenance practices, and providing practical solutions to address these inefficiencies.

RENEWABLE ENERGY RESOURCES, DISTRIBUTED GENERATION, AND CHP SERVICES

GDS provides expertise in addressing the complex economic, engineering, and governmental issues associated with renewable and other distributed generation resources that impact utilities, government agencies, developers, and their customers.

ELECTRIC DISTRIBUTION SYSTEM PLANNING AND DESIGN SERVICES

Hi-Line Engineering, a GDS company, offers electric distribution system planning, mapping, staking and design services to the electric utility industry throughout the United States. We provide high-quality, personal service to rural electric cooperatives, investor-owned utilities, municipalities, and the U.S. military. GDS has managed the design and construction of thousands of miles of electric distribution lines across the U.S.

ENERGY EFFICIENCY AND DEMAND SIDE MANAGEMENT SERVICES

Our staff of highly qualified program design and analysis specialists assists clients with the complexities of multi-faceted energy efficiency planning, program implementation and evaluation. GDS has completed numerous energy efficiency and demand response potential studies, administered programs in multiple states and conducted program evaluations for many utility and government clients.

LOAD FORECASTING SERVICES

A load forecast is a key input for system and financial planning; as a result, the forecast must provide timely and reliable projections. GDS has provided load forecasting services since our inception in 1986. From day-ahead hourly forecasts to intermediate and long term forecasts, GDS has maintained the appropriate level of staff, expertise and technological resources to meet our clients' forecasting needs.

DEREGULATION AND RETAIL ENERGY PROCUREMENT SERVICES

GDS provides a wide range of services to help clients plan for and benefit from participation in deregulated energy markets. These include, retail aggregation and energy procurement, merchant plant services, stranded cost analysis, and electric restructuring policy analysis.

TRANSMISSION SERVICES

GDS Transmission Services assist load-serving entities, transmission providers, independent generating companies, and state regulatory agencies with their "open access" issues and has the planning, operations, regulatory, and engineering experience necessary to assist its' clients in navigating through these challenging times. In addition to today's competitive issues, GDS also offers expertise in the areas of transmission maintenance, equipment procurement, and cost-of-service issues.

STATISTICS AND MARKET RESEARCH SERVICES

GDS supplies wide-ranging statistical and market research services to electric and gas utilities and other clients. Our services stretch from proven survey design that captures demographic profiles of consumers and potential customers, to data mining and analysis of utility load information.

INFORMATION TECHNOLOGY SERVICES

A complete understanding of client business problems and needs is critical to the implementation of successful IT systems. GDS specializes in understanding these issues and combines this knowledge with select technologies to create cost-effective IT solutions.

ENVIRONMENTAL SERVICES AND MANAGEMENT

GDS provides comprehensive environmental engineering, regulatory affairs, and energy systems services with a seasoned professional staff experienced in engineering, power production, renewable energy, and federal and state environmental regulations and policy.

REGULATORY AND RESTRUCTURING SERVICES

GDS provides comprehensive regulatory and restructuring services to generators, transmitters, distributors, and large users of energy. Numerous state and federal restructuring initiatives have made regulatory planning and strategy development essential. To assist our clients with this task, GDS brings decades of expert regulatory experience in key areas such as rate design and litigation, contract negotiation, and transmission access.

FINANCIAL ANALYSIS AND RATE SERVICES

The recent pace of regulatory change and uncertainty is unrivaled in the utility industry and requires equally unparalleled flexibility in ratemaking and regulatory strategies. GDS has been at the forefront of industry restructuring policy, offering broad expertise in regulatory accounting, economics, finance, and ratemaking.

WATER AND WASTEWATER UTILITY CONSULTING SERVICES

GDS provides expert assistance to water and wastewater utility management and users of water resources by addressing the complex engineering, accounting, economic, management, operational, regulatory, and policy issues that impact the water industry. GDS serves a variety of clients in this area including municipalities, investor-owned utilities, water districts, non-profit customer-owned systems, and government agencies.

NATURAL GAS CONSULTING SERVICES

GDS provides creative solutions to help our clients meet challenges arising in both regulated and competitive environments within the evolving natural gas utility industry. Our team of highly qualified professionals works to address complex economic, engineering, policy, and regulatory issues with clients including consumer groups, publicly owned utilities and regulatory authorities.

NERC COMPLIANCE SERVICES

GDS also provides assistance to clients in meeting their respective NERC Compliance requirements, including providing procedure development, gap analyses, SME training and mock audits for CIP and non-CIP requirements.

Ownership Structure

GDS incorporated under the laws of the state of Georgia in February 1986 and has grown to over 180 employees and \$40 million in revenue. GDS is managed by seven board of directors and twenty-two principals. GDS operates from seven locations including a corporate office in Marietta, GA, and additional office locations located in: Austin, TX; Auburn, AL; Madison, WI; Manchester, NH; Hallowell, ME; and Orlando, FL. GDS also operates under the trade names: Hi-Line Engineering, Green Line Environmental and Delta Technologies. Recently, GDS have incorporated GDS Canada Consulting, Ltd., a wholly owned Canadian subsidiary, in British Columbia.

2. SCOPE OF WORK

As outlined in the request proposal, GDS proposes to provide the following services. In accordance with the proposal, basic fees will be negotiated and fees for additional services will be mutually agreed upon.

Basic Services

GDS will perform a monthly review for Front Royal which will consist of:

- Review monthly power supply invoices from wholesale power suppliers to certify that they are in line with the suppliers' contracts
- Produce detailed monthly reporting of budget/forecast and actual cost comparisons to ensure that proper billing and cost allocation procedures are being followed
- Provide comprehensive monthly reports and charts that cross check all data between PJM and AMP invoicing to find any discrepancies
- If discrepancies are found, GDS will pursue the issue and find a resolution to correct the discrepancy
- Additionally, these monthly reports will provide insight into how Front Royal's power supply portfolio is performing which will assist with the development of power supply procurement on an ongoing basis

Additional Services

GDS can provide a wide range of engineering and consulting services to Front Royal. Below are some additional services that GDS can efficiently deliver:

Power Supply Planning: Evaluation of power supply portfolio resources, contract reviews, and management support with the goal of reducing the price of wholesale purchases with its power suppliers

Load Forecasting: GDS maintains the knowledge and resources necessary to provide load and resource forecasting

Retail Rate Evaluations and Recommendations: GDS can perform a full bodied cost of service study to support the development of retail rates, supplemental analysis of existing retail rates and recommend changes if necessary based on this analysis

Evaluation and Recommendation of Future Block Purchases of Power: Load shape evaluations and energy block models to forecast block hedging options

Evaluation and Recommendation of Potential New Generation Projects: GDS has the capability and experience to assess traditional generation projects (e.g. gas-fired combined cycle generation units) together with renewable generation projects (e.g. solar generation) on a technical and economic basis

3. KEY PERSONNEL

Client Representative

Garrett Cole, P.E., is a principal of Power Supply Services at GDS Associates and has been providing power supply consulting services for municipals and electric cooperatives for the past fifteen years. Mr. Cole has worked with clients in multiple regions of the country in evaluating power supply alternatives, including issuance, management, evaluation, and recommendations to serve future demand and energy requirements. Mr. Cole assists clients with the development of long and short-term power supply strategic plans and provides customized and diverse power supply portfolio strategies that include risk management tailored to each clients' goals. Work experience has been performed on behalf of the following cooperative, municipal and state agency clients:

Municipal Utilities / State Agencies / Joint Action Agencies

- Cleveland Public Power (Cleveland, OH)
- Arkansas Municipals:
Benton, Conway, Jonesboro, North Little Rock, Osceola, West Memphis
- Missouri Municipals:
Kirkwood, Poplar Bluff
- Pennsylvania Municipals:
Chambersburg, Ephrata, Mont Alto, Perkasie
- Indiana Michigan Municipal Distributors Association
- Virginia Municipals:
Bedford, Danville, Front Royal, Martinsville, Radford, Salem, VA Tech

Electric Cooperatives

- | | |
|--|-------------------------------------|
| • East Texas Electric Cooperative | • Kansas Electric Power Cooperative |
| • Northeast Texas Electric Cooperative | • Old Dominion Electric Cooperative |
| • Southern Maryland Electric Cooperative | • Tex-La Electric Cooperative |
| • Central Virginia Electric Cooperative | • Southwestern Electric Cooperative |

Proposed Staff

The table below provides a clear description of the roles and responsibilities of each key personnel responsible for completing the scope of work. GDS understands the importance of balancing a quality and cost-effective product. GDS is able to provide cost-effective solutions by leveraging GDS's junior and senior level staff of highly qualified personnel. All of our power supply staff have the expertise in providing the Town of Front Royal with exceptional service in all of the proposed areas.

Name	Title	Office	Roles & Responsibilities
Garrett Cole	Principal	GA	Project Oversight, & Project Direction
Breandan Mac Mathuna	Project Manager	GA	Project Manager
Ashley Wentworth	Associate Analyst	GA	Monthly Invoice Review/Reporting
Matt King	Project Engineer	GA	PJM Market Planning
Ryan Johnson	Project Manager	GA	Renewable Supply Planning

Availability and Account Management

GDS has consistently met client expectations and project goals in a timely and cost-efficient manner. In order to demonstrate the quality, timeliness, and financial awareness of our work, we confidently submit the client references as part of the Town of Front Royal's due diligence process. GDS has over 180 employees and our extensive staffing resources ensures that all projects are completed in a timely manner, including projects with unforeseen, expanded scope of work requirements. For example, the power supply department has fifteen engineers/consultants that can be deployed on various projects as specific needs arise from time to time. This type of redundancy and expertise is included in all departments at GDS and has enabled the firm to leverage its capabilities for a broad array of clients across the country. GDS has 10 areas of expertise, below is a department breakdown and approximate number of employees.

Power Supply Planning: 15 employees	Load Forecasting: 3 employees
Transmission and NERC: 12 employees	RTO Markets: 4 employees
Retail/Wholesale Rates: 10 employees	Distribution/Substation Engineering: 24 employees
Regulatory Support: 8 employees	Generation Services: 8 employees
Demand-Side Management & EE: 61 employees	RTO/ISO Markets: 4 employees

The majority of GDS' clients are publicly-owned electric utilities, either municipal systems or electric cooperatives, the majority relying on investor-owned utilities for power supply and transmission service. Consequently, GDS is keenly aware of the challenges faced by these utilities. Working together with our clients, we have fashioned right-fit solutions to the specific challenges faced by our clients, thereby helping our clients succeed. We measure our success by our clients' success. GDS has served a wide array of clients in terms of both size and location illustrated in the following table.

GDS' Recent Clients and Project Work (2012 – 2016)

GDS Client	State	Recent Years of Project Work
Benton Utilities	AR	2012 - 2016
North Little Rock Electric Department	AR	2012 - 2015
Municipal Electric Authority of Georgia	GA	2012 - 2015
City of Alexandria	LA	2012 - 2016
City of Houma	LA	2012 - 2015
Lafayette Utilities System	LA	2012 - 2015
Morgan City	LA	2012 - 2015
City of Natchitoches	LA	2013
Independence Power & Light Department	MO	2013 – 2015
City of Kirkwood	MO	2012 - 2015
North Carolina Eastern Municipal Power Agency	NC	2012 - 2015
North Carolina Municipal Power Agency No. 1	NC	2012 - 2015
City of Cleveland	OH	2012 - 2015
Borough of Chambersburg	PA	2012 - 2016
Borough of Ephrata	PA	2012 – 2016
Borough of Mont Alto	PA	2012 - 2015
Borough of Perkasio	PA	2012 - 2016
Piedmont Municipal Power Agency	SC	2013 - 2015
East Texas Electric Cooperative	TX	2012 - 2016
Northeast Texas Electric Cooperative	TX	2012 - 2016
Tex-La Electric Cooperative	TX	2012 - 2016
Sam Rayburn G&T Electric Cooperative	TX	2012 - 2016
Blue Ridge Power Agency	VA	2012 - 2016
Central Virginia Electric Cooperative	VA	2012 - 2016
Virginia Municipal Electric Association	VA	2012 - 2016

4. CONSULTING SERVICES PRICING

Pricing

Each month Front Royal will be invoiced \$1,000 as a fixed fee for basic services (invoice review) with no detail or summary of hours provided. For all additional services, the fee schedule below will be applied. The fixed fee and fee schedule could be modified each calendar year by the GDS Board of Directors.

SENIOR PROJECT MANAGERS \$235

PROJECT MANAGERS \$205

SENIOR PROJECT ENGINEER/SENIOR PROJECT CONSULTANT \$190

PROJECT ENGINEER/PROJECT CONSULTANT \$175

ENGINEER/ANALYSTS \$150

ASSOCIATE ENGINEERS/ASSOC ANALYSTS \$135

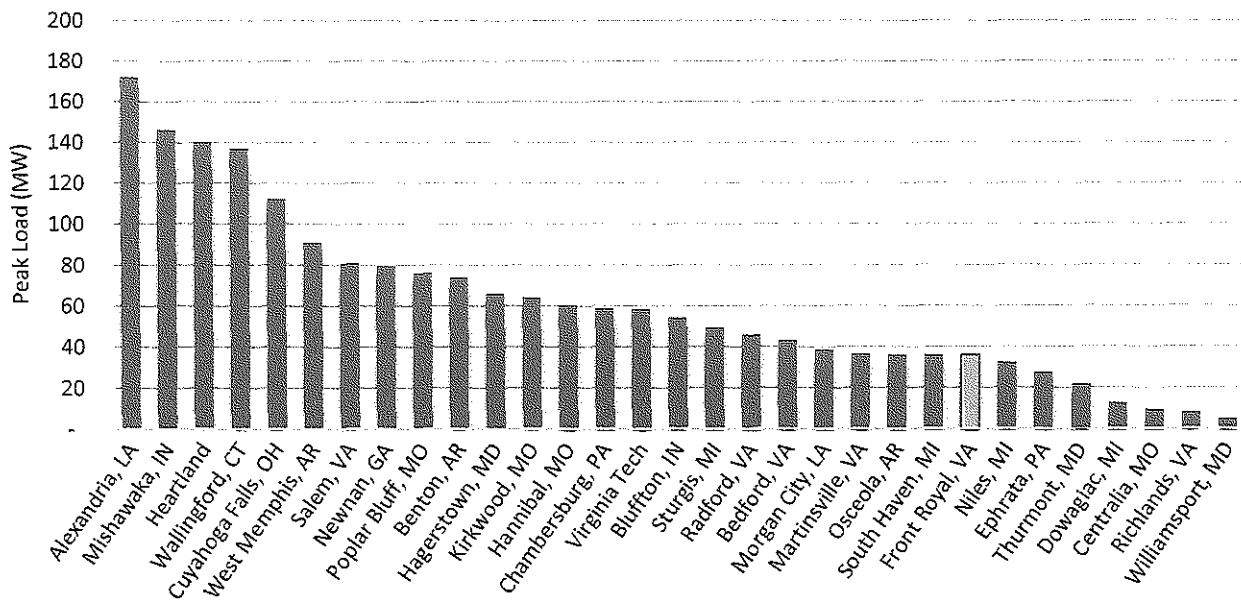
SECRETARIES/SR ENGINEERING ASSISTANTS \$90

CLERICAL/ENGINEERING ASSISTANTS \$75

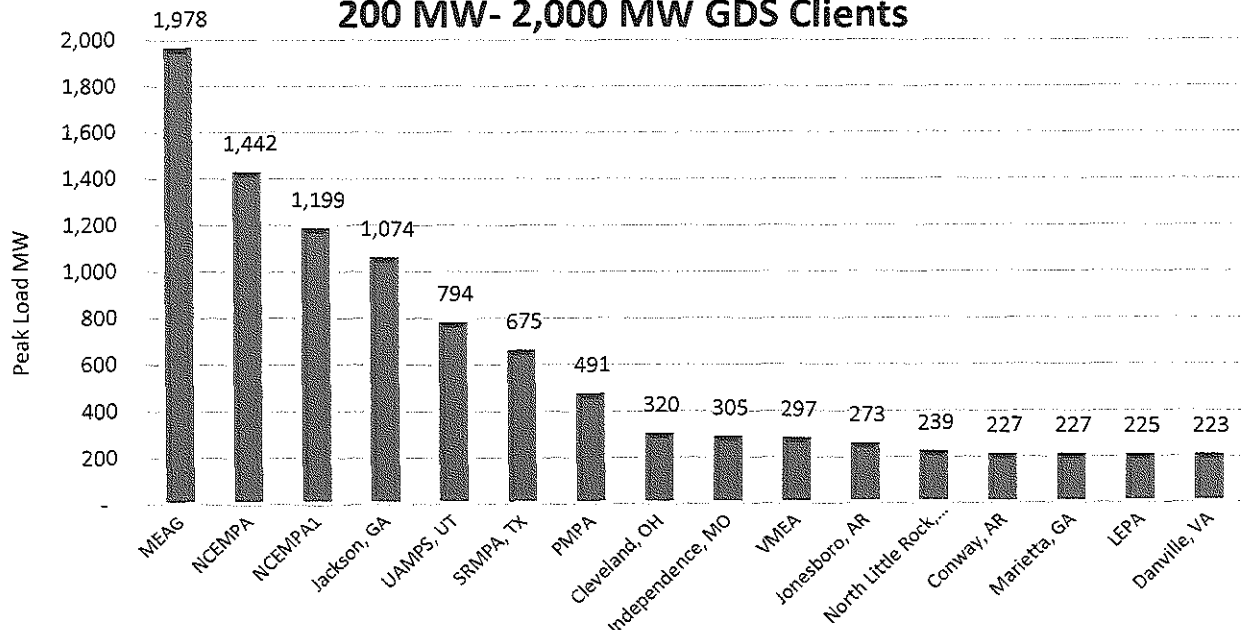
5. PROJECT EXPERIENCE & CLIENT REFERENCES

GDS has served a wide array of clients in terms of both size and location. Of these clients, illustrated in the charts below, over 50% retain GDS's expertise of general power supply consulting needs on an active, ongoing basis (Front Royal, VA is included for comparison purposes). Our broader municipal client list, which includes services other than power supply consulting, is much larger and can be provided upon request.

5 MW-200 MW GDS Clients



200 MW- 2,000 MW GDS Clients



The next several pages highlight client engagements that illustrate our proficiency in topics that we feel are important to the Town of Front Royal given the scope outlined in the current RFP. GDS has the knowledge and experience needed to conduct a competitive, efficient, and effective solicitation process from start to finish for various power supply products. GDS has evaluated alternatives ranging from full requirements contracts and block products to generation resources. We keep abreast of the constant changes in rules, regulation, and legislation impacting the power industry and advise clients on the effects of these changes in power supply decisions. GDS has advised in multiple contract negotiations on behalf of clients and advocates for the clients' best interest. GDS is dedicated to providing the Town of Front Royal with quality services at all times, including in the areas requested below:

- Monthly Invoice Review/Reporting
- Power Supply & Energy Consulting Services Experience
- Generation & Renewable Energy Experience
- Load Forecasting & Cost of Service Studies

The projects below provide a full field of view of the range of services GDS provides to municipal clients that include the same or similar services that the City is requiring. Many of the GDS team members have worked on some of the scope for services below. GDS is well versed and performs seamlessly across functional and skill set lines as is confirmed by the range of interdisciplinary services provided to the same client.

CITY OF CLEVELAND, OHIO

CLEVELAND PUBLIC POWER

Scope of Services:

- Power Supply Strategy
- Significant Market Modeling (PROMOD)
- Retail Rate Review
- Capacity Expansion Plan
- Potential Generation Alternatives
- Demand-Side Management Programs
- LED Street Lighting Review
- Wind Interconnection - Project Management
- Wind - Economic Review & Negotiation
- Customer Retention & Negotiation
- Marketing Plan
- Monitoring AMP Projects
- Solar Farm Interconnection
- Distribution System Corridor Plan
- Operating Budget
- Engineering Support - Bond Issuance
- NERC Bulk Electric System Assessment

CITY OF ALEXANDRIA, LA**UTILITY DIVISION****Scope of Services:**

- Integrated Resource Plan Development
- Power Supply Request for Proposals
- Generation Procurement Support
- Generator Interconnection System Impact Study
- Electric, Gas, Water and Wastewater Cost of Service Study
- Natural Gas Procurement
- Energy Risk Management
- NERC Compliance Audit Support

UTAH ASSOCIATED MUNICIPAL POWER SYSTEMS**Scope of Services:**

- Transmission Formula Rate
- Wind Integration Study
- Transmission Operations Review
- Landfill Gas Feasibility Assessment
- NERC Transmission Operations Procedure Development
- NERC Compliance Readiness Assessment
- Triennial Reports
- Water Use Assessment
- New Capacity Siting and Selection Assessment
- Combined Cycle Project Pro-Forma
- Power Station Budget Analysis
- Combustion Turbine Project Evaluation
- Power Plant Project Oversight & Development
- Natural gas pipeline and supply contracting including pipeline installation
- Due Diligence & Engineer's Report for Payson Power Project
- Transmission Provider Rate Intervention

CITY OF NORTH LITTLE, ARKANSAS**NORTH LITTLE ROCK ELECTRIC DEPARTMENT****Scope of Services:**

- Transmission Consulting Services
- Peaking Power Solicitation
- Coal Generation Environmental Risks Analysis
- Wind Energy Feasibility Study
- Power Supply RFP
- Integrated Resource Plan/Market Modeling (PROMOD)
- Financial Forecast
- Cogeneration Feasibility Review
- Back-Up Power Supply Planning
- Power Plant Economic/Transmission Screening Review
- Biomass Economic/Transmission Screening Review
- Regulatory Support
- Peaking Generation Planning & Development
- Operating Budget

- Cost of Service and Retail Rate Study
- Climate Strategies
- NERC Compliance Readiness Assistance
- Intermediate Generation Planning
- Base Load Generation Planning
- Distribution Engineering Support
- MISO Market Integration
- Distributed Generation Interconnection Agreement
- Distribution System Technology Resource 5-Yr Plan
- Hydro Plant Review & Life Extension Feasibility Analysis
- NERC/SERC Compliance Assistance
- Power Supply Analysis & Resource Review
- Power Supply Contract Management - Analysis & Risk Review
- Retail Rate and Cost of Service Study
-

CHAMBERSBURG, PENNSYLVANIA**CHAMBERSBURG MUNICIPAL ELECTRIC DEPARTMENT****Scope of Services:**

- Power Supply Master Plan
- Power Supply RFP
- Monthly Portfolio Reconciliation
- Landfill Gas Economic Analysis & Negotiation Support
- Large C&I Rate Development
- Cost of Service and Retail Rate Study
- Pole Attachment Rates
- Operating Budget

CITY OF LAFAYETTE ELECTRIC DEPARTMENT**Scope of Services:**

- Gas-fired Generation Asset Services
- Monitoring of Unit
- Cost Allocation Audit
- Prepare Integrated Resource Plan For LUS/NUS
- Plant Decommissioning Assistance
- Compliance Review of NERC Standards and Policies
- Daily Load Forecasting System
- Transmission Curtailment Analysis
- Transmission Services Consulting
- Develop Facility Connection Requirements
- Long-Term Load Forecast
- NERC Reliability Readiness Audit
- NERC/SPP Reliability Standards Compliance Assistance
- Annual Load Forecast
- NERC Training Development & Delivery
- System Stability Evaluation
- NERC 706 Audit Preparation
- Greenhouse Gas Rule Consulting

Power Supply & Energy Consulting Services Experience

**Denotes largest municipal electric utility in its respective state*

Client Organization: City of Cleveland, OH*
Project Name: Power Supply Services
Project Type: Power Procurement Strategy, Monthly Invoice Review, Requests for Proposals, Annual Operating Budgets
Project Duration: 2013 to Present
Project Status: Actively engaged via fixed fee structure

GDS is assisting Cleveland with a Beneficial Use Analysis of its power supply portfolio resources and the development of a power supply plan for future procurement efforts. Additionally, GDS is reviewing multiple asset opportunities through extensive RTO modeling. GDS also assists Cleveland with other distribution engineering, retail rate and energy efficiency planning efforts.

Client Organization: City of Danville, VA*
Project Name: Power Supply Services
Project Type: Power Procurement Strategy, Monthly Invoice Review, Requests for Proposals, Resource Evaluations, Annual Operating Budgets
Project Duration: 2015 to Present
Project Status: Actively engaged via fixed fee structure

GDS is assisting Danville the largest municipal in Virginia with the Analysis of its power supply portfolio resources and the development of a power supply plan for future procurement efforts. Additionally, GDS is reviewing multiple asset opportunities through extensive RTO modeling. GDS also assists Danville with billing reconciliation efforts in order to mitigate risk.

Client Organization: North Little Rock Electric Department*
Project Name: Power Supply Planning
Project Type: Power Procurement Strategy, Monthly Invoice Review, Requests for Proposals, Resource Evaluations, Annual Operating Budgets
Project Duration: 2006 to Present
Project Status: Actively engaged via fixed fee structure

GDS has been responsible for the issuance and evaluation of multiple RFPs for the City of North Little Rock, Arkansas. GDS' staff recently worked with the City of North Little Rock, Arkansas to develop a long-term Integrated Resource Plan. The plan included a 20-year electric load forecast, 20-year power supply plans, an analysis of demand side management as an alternative resource, an energy efficiency analysis and a transmission assessment to determine the ability of North Little Rock's transmission system to deliver capacity and energy from various sources. The Plan included conclusions and recommendations for implementation.

Client Organization: Borough of Chambersburg, PA*
Project Name: Power Supply Services
Project Type: Power Procurement Strategy, Monthly Invoice Review, Requests for Proposals, Resource Evaluations, Annual Operating Budgets
Project Duration: 2012 to Present
Project Status: Actively engaged via fixed fee structure

GDS has advised the City regarding its future power supply needs, prepared RFPs to solicit potential power supply resources, evaluated responses and negotiated contractual terms and conditions on behalf of the City. GDS developed annual Operating Budget forecasts for the City.

Client Organization: Blue Ridge Power Agency (BRPA)
Project Name: Power Supply Services
Project Type: Power Procurement Strategy, Monthly Invoice Review, Requests for Proposals, Resource Evaluations, Annual Operating Budgets
Project Duration: 1986 to Present
Project Status: Actively engaged

GDS has performed consulting services on behalf of BRPA (a group of Virginia Municipals, Central Virginia Electric Cooperative, and Virginia Tech) for almost 30 years. Over the past 20 years GDS has issued solicitations for alternative power supply resources and negotiated contractual terms and conditions between BRPA and various power suppliers. After PJM was organized as an RTO, GDS began assisting some BRPA members with the pursuit of a resource portfolio in an effort to create resource diversification and avoid timing exposure to the wholesale markets. In 2006-07, GDS assisted some BRPA members in selecting AMP as its preferred energy manager with additional rights to participate in new power projects. GDS develops an annual Operating Budget and audits monthly invoices for a number of BRPA members. GDS has recently developed a Power Supply Master Plan for 4 members of BRPA and has also conducted multiple RFPs for long and short-term block energy.

Client Organization: North Carolina Eastern Municipal Power Agency (NCEMPA)
Project Name: Consulting Engineer
Project Type: Various Power Supply Planning Activities
Project Duration: 2012 to Present
Project Status: Actively Engaged

GDS is assisting NCEMPA, the wholesale power supplier to 32 municipal electric utilities in eastern North Carolina, serving as consulting engineer of record per their bond resolution. GDS assists in areas such as the preparation of annual engineering reports, bond financings, load forecasting, wholesale rate projections and design, review of OATT formula rates, auditing of contractual power supply charges and various power supply planning activities.

Specifically, over the last four years, GDS consultants on the Project Team have been responsible for supporting the issuance of refunding Bonds and new money Bonds used to fund capital improvements to NCEMPA's nuclear (Brunswick and Harris) and coal-fired (Mayo and Roxboro Unit 4) generating units. Scope of services included cash flow analysis in support of bond amount calculations, categorization of capital addition projects qualified for tax-exempt financing, and preparation of a sellback certificate and report setting forth the estimated capital cost of the improvements and total cost of acquisition and construction of NCEMPA's entire ownership interest in the jointly owned generating units (since their first closing in 1982).

Client Organization: Piedmont Municipal Power Agency (PMPA)**Project Name:** Consulting Engineer**Project Type:** Various Power Supply Planning Activities**Project Duration:** 2012 to Present**Project Status:** Actively Engaged

GDS is assisting PMPA, the wholesale power supplier to 10 municipal electric utilities in the Piedmont region of South Carolina, serving as consulting engineer of record per their bond resolution. GDS assists in areas such as the preparation of annual engineering reports, bond financings, wholesale rate projections and design, review of OATT formula rates, contract administration, and various power supply planning activities.

Over the last four years, the project team has been responsible for supporting the issuance of refunding Bonds and new money Bonds used to fund capital improvements to PMPA's Catawba Nuclear Project. Scope of services included cash flow analysis in support of bond amount calculations, categorization of capital addition projects qualified for tax-exempt financing, and preparation of a certificate that such capital additions were necessary or desirable to achieve design capability, improve operating reliability of the Catawba Nuclear Station, comply with regulatory requirements, or for safety, public health, or environmental purposes.

Client Organization: City of Alexandria, LA**Project Name:** Integrated Resource Planning, Power Supply Planning**Project Type:** Power Procurement Strategy, Requests for Proposals, Resource Evaluations**Project Duration:** 2009 to Present**Project Status:** Actively Engaged

Beginning in 2009 GDS was tasked with assessing market alternatives for comparison to Alexandria's current requirements contract and assisting the City with negotiating a new power supply agreement. GDS is currently assisting Alexandria with the development of an Integrated Resource Plan in advance of the expiration of their current requirements contract with CLECO. The overall project includes load forecast projections, identification of capacity/energy deficiencies, development and issuance of a RFP to assess power supply alternatives, including self-build alternatives, necessary transmission service requirements, and a study of retail rate impacts for the various alternatives.

Client Organization: Sam Rayburn Municipal Power Agency, TX**Project Name:** Power Supply Consulting**Project Type:** Various Power Supply Planning Activities**Project Duration:** 1986 to Present**Project Status:** Actively Engaged

GDS provides power supply consulting to the Sam Rayburn Municipal Power Agency for its 130 MWs of municipal load and leads efforts to capture margin from supply optionality to 550 MWs of wholesale and industrial load in MISO.

Generation & Renewable Energy Experience

**Denotes largest municipal electric utility in its respective state*

Client Organization: The Borough of Chambersburg, Pennsylvania*
Project Name: Behind-The-Meter Generation Assessment (30 MW)
Project Duration: 2015 to Present
Project Status: In Progress

GDS has worked on numerous projects related to the Borough of Chambersburg's two behind-the-meter generators, totaling 30 MW. Among those projects, GDS has evaluated the variable costs to operate the units and developed a range of strike prices to be used in the PJM market to adequately recover costs. Additionally, GDS reviews transmission & capacity offsets and market hedge benefits of the generators on a continual basis.

Client Organization: City of Kirkwood, Missouri
Project Name: Behind-The-Meter Generation Assessment
Project Duration: 2014
Project Status: Completed

GDS has developed analyses for the City of Kirkwood to review various behind-the-meter generation opportunities. More recently, GDS completed a high-level review to determine a 20-year net present value of a low-emissions micro-turbine to be used as a capacity hedge in the changing MISO capacity market.

Client Organization: City of Cleveland, OH*
Project Name: Behind-The-Meter Generation Assessment (59 MW)
Project Duration: 2015 to Present
Project Status: In Progress

Every year, GDS aides the City of Cleveland with their PJM demand response bidding process related to their 48 MW of gas turbine capacity and 11 MW of diesel generation located behind the meter. GDS compares the benefits and risks associated with bidding into the PJM capacity market versus peak shaving to determine the most economic situation for the City. Additionally, GDS stays abreast of any emission control regulation that could impact the client and economic analysis. When emission regulations occur, such as RICE-NESHAP, recommendations associated with generator impacts and updates are discussed with the client.

Client Organization: Allegheny Electric Cooperative, Inc.
Project Name: Distributed Generation Cost/Benefit Analysis within PJM
Project Duration: 2008
Project Status: Completed

GDS Associates was requested to perform a feasibility analysis which included: (1) obtaining capital cost estimates, operational costs and parameters, and maintenance costs from various distributed generation vendors, (2) developing projections of all study variables (e.g., fuel prices, RPM, transmission rates), and (3) creating a feasibility analysis 'base case' plus several sensitivities for fuel cost, RPM pricing, and operational hours of the units. The purpose of the ten year study was to determine the magnitude of the economic benefits for installing specific distributed generation technologies within various PJM zones.

Client Organization: Sam Rayburn Municipal Power Agency, Sam Rayburn G&T, and Tex-La, TX
Project Name: Hydropower Management
Project Duration: 1986 to Present
Project Status: Actively Engaged

GDS manages Tex-La, Sam Rayburn G&T and Sam Rayburn Municipal Power Agency's hydropower supply from the Southwestern Power Administration and the Corps of Engineers.

Client Organization: City of Danville, Virginia*
Project Name: Peaking Capacity RFP (5-10 MW AC)
Project Duration: 2015 to Present
Project Status: In Progress

In conjunction with the City of Danville, Virginia, GDS conducted a Request for Proposals (RFP) for peaking capacity. Responses to this RFP included 6 solar proposal variations representing a range of terms, generally ranging from 20-30 years, and technology options including fixed-tilt and single-axis trackers. The solar proposals were reviewed and summarized, and a recommendation to enter exclusive discussions with one provider was delivered to the Danville City Council. A draft term sheet is in development with the top two bidders, and PPA negotiations are expected to commence.

Client Organization: City of Martinsville, Virginia
Project Name: Solar Review (2.5 MW AC) (2015)
Project Duration: 2015 to Present
Project Status: In Progress

GDS was responsible for a solicitation for a 2.5 MW AC solar energy generating facility to be located on four preliminary sites, behind-the-meter within Martinsville's service territory. All sites were owned by the City and included acreage on a landfill, adjacent to a prison complex and on an industrial-zoned property next to a rail line. A solar project information sheet was developed that included scope, solicitation schedule and detailed site information. The information sheet was sent to a small, reputable group of solar developers that had previously completed projects in PJM and could provide proposals within an expedited schedule. All of the developers responded within the designated timeline with PPA options ranging from 20-30 years using fixed-tilt or single-axis trackers. GDS is currently in term sheet discussions with the top solar developers prior to PPA negotiations with the winning bidder.

Client Organization: Borough of Chambersburg, Pennsylvania*
Project Name: Review of Solar Supply Alternatives (6 MW AC)
Project Duration: 2015 to Present
Project Status: In Progress

In conjunction with the Borough of Ephrata, GDS conducted a solicitation for solar generation facilities to be located (potentially) on four sites, behind-the-meter within Ephrata's and Chambersburg's service territories. A solar project information sheet was developed that included scope, schedule and site information. The information sheet was sent to a small, reputable group of solar developers that had previously completed projects in Pennsylvania or surrounding areas and could provide proposals within an expedited schedule to take advantage of the Federal ITC program. All of the developers responded within the designated timeline with PPA options ranging from 20-30 years using fixed-tilt or single-axis trackers. A presentation was created with a detailed summary of the solar proposals including a forecast of solar energy costs, capacity offsets, solar renewable energy credits (SRECs) and any APS zone-specific behind-the-meter benefits due to offsetting congestion, transmission and ancillary service costs. The evaluation showed that solar generation placed behind-the-meter was the most advantageous option compared to other power supply options. Currently, GDS is assisting Chambersburg with land cost evaluations to determine the most economic and viable site option. While a specific site is being determined, GDS continues to encourage competitive pricing from a short-list of bidders, negotiate favorable terms for liquidated damages and security, and ensure the project timeline stays on track for completion by the end of 2016.

Client Organization: The Borough of Ephrata, Pennsylvania
Project Name: Review of Solar Supply Alternatives (3.75 MW AC)
Project Duration: 2015 to Present
Project Status: In Progress

In conjunction with the Borough of Chambersburg, GDS conducted a solicitation for solar generation facilities to be located (potentially) on four sites, behind-the-meter within Ephrata's and Chambersburg's service territories. A solar project information sheet was developed that included scope, schedule and site information. The information sheet was sent to a small, reputable group of solar developers that had previously completed projects in Pennsylvania or surrounding areas and could provide proposals within an expedited schedule to take advantage of the Federal ITC program. All of the developers responded within the designated timeline with PPA options ranging from 20-30 years using fixed-tilt or single-axis trackers. A presentation was created with a detailed summary of the solar proposals including a forecast of solar energy costs, PJM capacity offsets, solar renewable energy credits (SRECs) and any PPL zone-specific behind-the-meter benefits due to offsetting congestion, transmission and ancillary service costs. The evaluation showed that solar generation placed behind-the-meter was the most advantageous option compared to other power supply options. Ephrata entered into exclusive negotiations with a winning developer and GDS is assisting with the term sheet and PPA negotiations currently.

Client Organization: Conway Corporation
Project Name: Solar RFP (1 MW AC)
Project Duration: 2015 to Present
Project Status: In Progress

GDS was responsible for the drafting, distribution, and evaluation of responses for a Request for Proposals (RFP) for a 1 MW AC solar energy generating facility to be constructed at a 10-acre site behind-the-meter within Conway's service territory. Eight respondents submitted 25 proposal variations with a range of terms and technology options including fixed tilt and single-axis trackers. The responses were summarized and an initial solar review presentation was delivered to Conway management. The presentation confirmed the benefits of placing a solar facility behind-the-meter in MISO by offsetting increasing capacity, network transmission, and ancillary service costs. A long-term solar energy economic model was developed to review the various power purchase agreement structures including those with pre-payment, buyout and residual payment termination options. All deliverables were sent to Conway representatives for review and deliberation for the bidder short-list selection. Specific assistance with interconnection issues was provided including the development of a draft Distributed Generation Interconnection Agreement. A draft term sheet was developed and reviewed with the top two bidders prior to PPA negotiations

Client Organization: Sulphur Springs Valley Electric Cooperative (SSVEC)
Project Name: Solar Request for Proposals (20 MW AC)
Project Duration: 2014 to Present
Project Status: In Progress

GDS was responsible for the drafting, distribution, and evaluation of responses for a Request for Proposals (RFP) for a 20 MW AC solar energy generating facility to be constructed at a predetermined site behind-the-meter within SSVEC's service territory. SSVEC's objective was to obtain a desired level of generation at the lowest overall cost to satisfy its Arizona Corporation Commission-mandated renewable targets. Nineteen respondents provided over 50 proposal variations collectively. Most of the proposed projects took advantage of the Federal ITC program in which 30% of the capital costs are reimbursed to the developer if the project achieves commercial operation by 12/31/16. To determine a bidder short-list, a long-term solar energy economic model was developed to evaluate the proposals. The model provided the net present value of future cash flows for several scenarios and sensitivities including power purchase agreement structures containing pre-payment and buyout options. A solar technical review was performed on the proposed modules, inverters, trackers, and warranties. Based on the long-term economic model and technology review, a winner was selected and approved by SSVEC's Board of Directors. GDS assisted SSVEC in the negotiation of a solar PPA, an interconnection agreement with the local transmission company, and a lease and sublease agreement with the selected solar developer.

Client Organization: Central Virginia Electric Cooperative (CVEC)
Project Name: Economic Assessment of Solar Proposals (10 MW AC)
Project Duration: 2014 to Present
Project Status: In Progress

GDS performed an economic evaluation of unsolicited solar energy proposals (ranging in size from 10-80 MW AC) received from several solar project development companies. Each proposal was reviewed in detail and assessed based on multiple billing components including PPA energy rate, SRECs, PJM market capacity costs/credits, and congestion costs/credits. A detailed summary of each solar proposal's geographic location, economic feasibility and timeline was outlined in a presentation comparing all findings to equivalent market costs in CVEC's region. GDS continues to support CVEC in its long term traditional and renewable power supply planning.

Client Organization: City of Cleveland, OH*
Project Name: Combined Heat and Power Waste to Energy Project
Project Duration: 2014
Project Status: Completed

CPP, through a local public-private partnership that includes CPP, the City of Cleveland (the "City"), and Cleveland Thermal, is involved in the development of a combined heat and power waste to energy project (the "Project") that will utilize the City's municipal solid waste and other regional waste to produce a long-term renewable power supply available for purchase from CPP. At peak power output, the Project will produce approximately 20 MWs of electricity in addition to steam that will be sold to Cleveland Thermal's customers. The Project's objective is to provide locally-sourced, long-term fixed-rate renewable power supply to help meet the environmental sustainability objectives of CPP, the City, and local power customers.

Client Organization: City of Cleveland, OH*
Project Name: Offshore Wind Economic Review (18 MW)
Project Duration: 2013 to 2014
Project Status: Completed

GDS was responsible for assessing the feasibility of a local offshore wind project to be located in Lake Erie. An investigation into the project drivers showed heavily reliance upon stakeholder support, grant dollars, federal and state incentives that were needed to accompany long-term PPAs. Without a specific DOE grant and the Ohio state RPS mandate, the project could not go forward. A technical review of the wind turbines, monopiles, and the underwater transmission lines was conducted. A long-term economic model was created to measure the cost impacts to CPP's power supply portfolio costs. GDS submitted a thorough presentation to the Mayor of Cleveland with a recommended participation level in the project. GDS assisted with the Term Sheet and Letter of Intent negotiations before awaiting the potential DOE award. In mid-2014, the DOE announced that the Lake Erie offshore wind project would not receive one of its grants.

Market Participation & FERC Rules and Policies

Client Organization: Southern Maryland Electric Cooperative
Project Name: PEPCo Formula Rate Review
Project Duration: Completed annually
Project Status: On-going

GDS is familiar with the FERC regulated formula rates of PEPCo and BG&E and annually participates in the review of the PEPCo formula on behalf of customers. GDS has significant experience with FERC wholesale and transmission matters and has submitted testimony in hundreds of cases at FERC over the years. GDS has sponsored testimony at the Maryland Commission as well in Case No. 9092 on behalf of the University of Maryland.

Client Organization: Blue Ridge Power Agency
Project Name: PJM Capacity Performance Review
Project Duration: 2015
Project Status: Completed

In response to the 2014 Polar Vortex, PJM proposed and enacted strict changes to the PJM Reliability Pricing Model beginning in the 2016/2017 planning year. GDS closely monitored the proposals submitted by PJM and responses from FERC. As the final ruling was released, GDS informed the Blue Ridge Power Agency and many other clients of the upcoming changes to the PJM RPM. GDS continues to provide budgeting information to assist clients with the on-going changes in the PJM market and their impacts on wholesale power rates.

Load Forecast & Cost of Service Studies

Client Organization: Wabash Valley Power Association
Project Name: Load Forecast
Project Duration: 2011 to Present
Project Status: Biannual forecasts, last completed in August 2015

GDS has developed long-term load forecasts for each of WVPA's 20+ member distribution cooperatives and for the total G&T biannually since 2011. Forecast development includes use of econometric and end-use components. The work product includes full report documentation and presentation of the forecasts for each member system and for WVPA.

Client Organization: Lansing Board of Water & Light (Lansing, MI)
Project Name: Load Forecast
Project Duration: 2013-2014
Project Status: Completed

GDS developed long-term energy and demand forecasts for LBWL and Traverse City. We used econometric techniques to develop projected energy requirements, range forecasts, and to perform weather normalization. We also prepared MISO CP demand forecasts for both cities in 2013 and 2014 for submittal to MISO.

Client Organization: Sharyland Utilities**Project Name:** Load Research in Support of Retail Rate Filing**Project Duration:** 2012 to Present**Project Status:** Current rate filing will be made in 2016, load research demand estimation is presently underway

This is the second load research study conducted by GDS on behalf of Sharyland Utilities. GDS performed stratified random sample designs for all customer classes, performed data review and cleaning, did quality control and quality assurance of all data, performed ratio estimation expansions for all demands necessary to completed an allocated cost of service study, prepared exhibits for rate filings with the Public Utility Commission of Texas, and will be participating in the 2016 filing as expert witnesses in the areas of Cost of Service and Load Research

Client Organization: North Little Rock Electric Dept. (North Little Rock, AR)**Project Name:** Cost of Service and Rate Study**Project Duration:** 2009-2014**Project Status:** Completed

GDS has conducted several cost of service and rate analyses for NLRED. Revisions to the rates were made to better track cost of service results and to send improved price signals to customers. GDS also prepared a five-year financial forecast for NLRED and rate levels were established to meet cash and debt service requirements for the forecast period. Revisions were made to improve the interaction between rates for small, medium and large commercial customers. The Firm also assisted NLRED with development and administration of revisions to the energy cost recovery adjustment mechanism. The formula was revised to better track and levelize changes in power cost that occur due to fluctuations in the utility's hydroelectric generation, entitlement purchases from a coal-fired generation resource, as well as its market-based purchases in MISO. Finally, GDS worked with NLRED staff to establish minimum and target cash reserve levels to enhance the utility's risk management and to improve credit rating scores. GDS assisted in the presentation and approval of the changes in the adjustment formula to the City Council.

Client Organization: Altamaha Electric Membership Corporation (Lyons, GA)**Project Name:** Cost of Service and Rate Study**Project Duration:** Ongoing**Project Status:** Ongoing

Since the Firm's inception, GDS has worked with Altamaha EMC to provide assistance in the cost of service and rate analysis, wholesale PCA administration, power supply administration as well as development and administration of retail service agreements and retail rates applicable to large load customers. The assistance to large commercial customers covers a wide variety of customers. The largest includes a 50 MW customer with multiple sources of customer-owned generation, and where the utility worked with the customer to provide access to market-based sources of energy. Other rate and contract assistance has been provided for customers ranging in size from 1 to 5 MW in the forest products, food processing, and education business segments. GDS regularly provides assistance to Altamaha EMC in the development and administration of its wholesale PCA. GDS has made many presentations to the Altamaha Board of Directors requesting approval of rate changes and providing information regarding rate and power supply matters.

GDS also developed a comprehensive interconnection policy for Altamaha EMC that is applicable to generators with up to 10 MW of installed capacity. A portion of that policy developed by GDS addresses net metering provisions that meet the requirements of Georgia regulations. The treatment of energy produced by generation that is not subject to net metering was also developed. When the interconnection policy was first developed, GDS determined the avoided cost of energy that is credited to net metering customers with excess generation. Since that time, GDS has calculated updates to the avoided cost on an annual basis.

Client Organization: Borough of Chambersburg Electric Department (Chambersburg, PA)
Project Name: Cost of Service Study
Project Duration: 2014
Project Status: Completed

GDS worked with Chambersburg to complete a cost of service and rate design project in 2014. The rate study was conducted to revise rates to better reflect the costs incurred under new power supply arrangements. The study included detailed analysis of the pricing applicable to both an existing and prospective large industrial customers. The rate study also included development of revisions to the utility's power supply cost adjustment formula. GDS continues to provide rate analysis as requested including commercial rate administration and development of LED outdoor lighting rates.

Client Organization: Cleveland Public Power (Cleveland, OH)
Project Name: Cost of Service Study
Project Duration: 2014
Project Status: Completed

GDS conducted a cost of service study for CPP in 2014. The Firm developed a ten-year financial forecast and multiple scenarios of the forecast as part of the utility's efforts to conduct a re-financing of a portion of its debt and to lower O&M costs. GDS assisted CPP to develop revisions to its ordinances related to the recovery of purchased power expenses and to improve capabilities to compete for new large load customers. GDS participated in the presentation of the ordinance revisions to the committee of the City Council responsible for utility matters. GDS also completed in 2015 a comprehensive strategic marketing plan for CPP including rate and economic initiatives.

Client Organization: Southeastern Indiana Rural Electric Membership Corporation (Osgood, IN)
Project Name: Cost of Service and Rate Study
Project Duration: 2015
Project Status: Completed

GDS completed a cost of service and rate study for SEI in 2015. The rate study was conducted primarily to revise rates to better reflect the costs incurred under power supply purchases from Hoosier Energy, SEI's all requirements power supplier. The study included the development of a pilot rate applicable to residential customers that includes time of use and critical peak pricing elements, as well as pricing for commercial customers that have the capability to control load during peak demand periods.

Additional project experience and references from GDS's extensive list is available upon request.

References

EAST TEXAS ELECTRIC COOPERATIVE, INC.

SAM RAYBURN G&T ELECTRIC COOPERATIVE

TEX-LA ELECTRIC COOPERATIVE OF TEXAS, INC.

Client Contact: Edd Hargett, General Manager
Address: P.O. Box 631623
Nacogdoches, TX 75963
Telephone: 936-560-9532
Email: eddh@gtpower.com

BOROUGH OF EPHRATA, PENNSYLVANIA

Client Contact: Robert Thompson, General Manager
Address: 124 South State Street
Ephrata, PA 17522
Telephone: 717-738-9202 ext. 108
Email: bthompson@ephrataboro.org

BOROUGH OF PERKASIE, PENNSYLVANIA

Client Contact: Andrea Coaxum, General Manager
Address: 620 West Chestnut Street
P.O. Box 96
Perkasie, PA 18944
Telephone: 215-257-5065
Email: manager@perkasieborough.org

CITY OF NORTH LITTLE, ARKANSAS

NORTH LITTLE ROCK ELECTRIC DEPARTMENT

Client Contact: Jason Carter, General Manager
Address: 1400 West Maryland Avenue
North Little Rock, AR 72120
Telephone: 501-372-0100
Email: jcarter@nlr.ar.gov

BOROUGH OF CHAMBERSBURG, PENNSYLVANIA

CHAMBERSBURG MUNICIPAL ELECTRIC DEPARTMENT

Client Contact: Ron Pezon, Electric Department Superintendent
Address: 100 South Second Street
Chambersburg, PA 17201
Telephone: 717-261-3238
Email: rpezon@chbgboro.com

NORTHEAST TEXAS ELECTRIC COOPERATIVE, INC.

Client Contact: Rick Tyler, General Manager
Address: 1127 Judson Road
Suite 249
Longview, TX 75601
Telephone: 903-757-3282
Email: ricktyler@ntecpower.com

VIRGINIA MUNICIPAL ELECTRIC ASSOCIATION

Client Contact: Brian O'Dell, General Manager
Address: 78 West Bruce Street
Harrisonburg, VA 22801
Telephone: 540-246-9675
Email: brian@hbgelec.com

6. TECHNOLOGICAL RESOURCES

GDS utilizes industry-standard tools and resources to assist in serving its clients' needs. For production cost modeling and projecting nodal power price forecasts, GDS utilizes ABB's PROMOD IV software platform. For Business Intelligence Services which include market research, real-time news, and analytical tools GDS subscribes to the online database SNL Financial. Financial analyses are completed primarily in Microsoft's Excel software and the various components of the Microsoft Office Suite are utilized in producing deliverables as need be.

In addition to outside software platforms, GDS has also developed its own proprietary database warehousing system called HIVE for managing RTO data. Across RTO markets nationwide, GDS actively pulls and stores



market-close LMP data for all nodal points in those markets via regular data collection efforts. In addition, market participant clients can grant certificates to GDS's HIVE database for regular collection and storage of the participant's market invoices and/or generating asset data. The database

is primarily queried via Excel templates and any of the client's data can be downloaded and reported to the specific client quickly. In addition, automated summary email deliveries of data stored by the platform are possible. Typical email reports previously requested include items such as day-ahead close information (LMPs, generating asset info, etc.) or alerts if market conditions exceed certain volatility thresholds. This in-house database solution uniquely positions GDS to be at the forefront for producing timely, periodic reviews of a client's market data including billing reconciliation and shadow settlement efforts and is an asset for developing energy procurement strategies.

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Town of Front Royal, Virginia Work Session Agenda Form

Date: July 5, 2016

Agenda Item: Town Health Insurance RFP Discussion

Summary: Information will be provided to Council at the work session

Council Discussion: Council takes desired action

Staff Evaluation: Staff will be presenting

Budget/Funding: N/A

Legal Evaluation: Town Attorney will be available

Staff Recommendations: Staff will be available

Town Manager Recommendation: Town Manager will be available

Council Recommendation:

☐ Additional Work Session ☐ Regular Meeting ☐ No Action

Consensus Poll on Action: ____ (Aye) ____ (Nay)

Work Session

5



Town of Front Royal, Virginia Work Session Agenda Form

Date: July 5, 2016

Agenda Item: Request to Change Street Name – CBM Mortgage

Summary: Staff received a request from Cory Michael, President/CEO of CBM Mortgage, Inc. seeking to change the section of Warren Avenue that solely houses his new CBM facility, to "Hometown Way" with the numeric address to be the number 1. The cost of a new sign is estimated to be no more than \$100.00.

Council Discussion: Council takes desired action.

Staff Evaluation: Director of Planning/Zoning has submitted comments in the attached email

Budget/Funding: No budget impact.

Legal Evaluation: The Town Attorney will be available to answer additional questions.

Staff Recommendations: Staff will be available to answer additional questions

Town Manager Recommendation: The Town Manager will be available for additional questions.

Council Recommendation:

☐ Additional Work Session ☐ Regular Meeting ☐ No Action

Consensus Poll on Action: ____ (Aye) ____ (Nay)



June 20, 2016

RE: Street name for new CBM location

Steve and Jeremy,

I am writing to request the section of Warren Ave. that will solely house the new CBM facility be renamed to Hometown Way, and the numeric address to be 1 for the building. We deliberated over what would make the most sense with our industry and company, and feel Hometown Way is most appropriate. We are open to pay for any costs the town would have with updated the signage. Thank you for your consideration.

Sincerely,

Cory Michael

President/CEO

CBM Mortgage, Inc.

112 East 6th Street
Front Royal, VA 22630
(540) 635-1112
www.cbmmortgage.com

Tina Presley

From: Jeremy Camp
Sent: Wednesday, June 29, 2016 9:49 AM
To: Tina Presley
Cc: Steven Burke; Connie Potter; Darryl Merchant
Subject: Hometown Way

Hello Tina,

This email is in regards to the request submitted by CBM Mortgage to rename the portion of Warren Avenue located north of N Commerce Avenue. Specifically, I understand that the Applicant has requested to rename this portion of Warren Avenue to **"Hometown Way"**, and to assign the new address of **"1 Hometown Way"** to the former Social Services building. An aerial image is shown below for reference.

Below are my review comments for consideration:

- **"Hometown Way"** does not present any duplication issues with 911 addressing and could be used. **"Way"** is a valid suffix, although uncommon.
- The number **"1"** is a concern for the following reasons:
 - a) #1 is an odd number on the side of the street that should be an even number;
 - b) #1 is out of sequence from the numbering pattern in the area, which is the 900 block; and
 - c) #1 would not leave any numerical space for future addresses that may be needed on the property immediately to the south.
- Changing the street name and address would impact the address assigned to the Park on the east side of the road (903 Warren Avenue). I would recommend input from Warren County Parks and Recreation and/or Warren County Administration. I did speak with the Warren County GIS Coordinator about the request and he was in agreement with the above comments.
- In addition to Warren County, there are multiple other property owners along Warren Ave, including the following:
 - a) Cai, Shuyi. Mailing Address: 1103 Moorefield Hill Ct. Vienna, VA 22180
 - b) Llewellyn, Ronald L & Corinne W. Mailing Address: 905 Virginia Avenue Front Royal, VA 22630
 - c) White, JD & Jane A Family. Mailing Address: PO Box 590 Front Royal, VA 22630



Sincerely,

Jeremy Camp, Director
Dept. of Planning & Zoning

TOWN OF FRONT ROYAL

P.O. Box 1560

Town Administration Building

102 East Main Street

Front Royal, Virginia 22630-1560

(540) 635-4236 (Office)

(540) 631-2727 (Fax)

jcamp@frontroyalva.com (email)

www.frontroyalva.com (website)

Disclaimers: The information contained in this communication may be otherwise privileged, confidential, and/or protected from disclosure. If the reader of this communication is not the intended recipient, or any employee or agent responsible for delivering this message to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by replying to the message and deleting it from your computer. Unless expressly stated otherwise, the information within this communication is not intended to represent a zoning determination. Furthermore, any zoning information provided within this communication is based on existing laws that are subject to change by Town Council. Thank you.

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Town of Front Royal, Virginia Work Session Agenda Form

Date: July 5, 2016

Agenda Item: Liaison Committee Meeting Items for July 21, 2016

Summary: The next Liaison Committee Meeting is scheduled for July 21, 2016. The May meeting was cancelled due to a conflict. The last meeting was held March 17, 2016 and the agenda from that meeting is attached. The County of Warren has requested the addition of one item for discussion – Current Town of Front Royal Transportation Priorities. Council will vote on any additional items at the July 11, 2016 Council Meeting.

Council Discussion: Council takes desired action

Staff Evaluation: None

Budget/Funding: None

Legal Evaluation: Town Attorney will be available for questions or concerns

Staff Recommendations: None

Town Manager Recommendation: Town Manager will be available for questions/concerns

Council Recommendation:

☐ Additional Work Session ☐ Regular Meeting ☐ No Action

Consensus Poll on Action: ____ (Aye) ____ (Nay)

Work Session



COUNTY OF WARREN

County Administrator's Office
Warren County Government Center
220 North Commerce Avenue, Suite 100
Front Royal, Virginia 22630

Phone: (540) 636-4600

FAX: (540) 636-6066

Email: dstanley@warrencountyva.net

Douglas P. Stanley
County Administrator

April 6, 2016

BOARD OF SUPERVISORS

CHAIR
Linda P. Glavis
South River
District

VICE-CHAIR
Archie A. Fox
Fork
District

Tony F. Carter
Happy Creek
District

Daniel J. Murray, Jr.
North River
District

Thomas H. Sayre
Shenandoah
District

Mr. Steve Burke, Town Manager
Town of Front Royal
P.O. Box 1560
Front Royal, Virginia 22630

RE: *Liaison Committee Agenda Items*

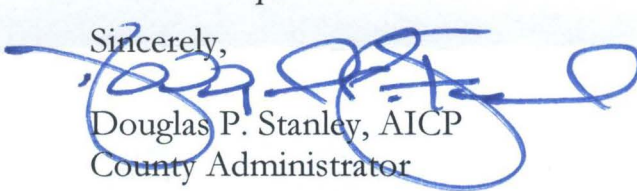
Dear Steve:

At its meeting on Tuesday, April 5, the Warren County Board of Supervisors requested that the following items be included for discussion at an upcoming Liaison Committee meeting:

- ▶ Current Town of Front Royal Transportation Priorities

In addition, our next scheduled Liaison Committee meeting is scheduled for Thursday, May 19 at 6:00 pm. Please note that the Northern Shenandoah Valley Regional Commission has its annual banquet scheduled that evening at 5:00. Please let me know if your representatives would like to reschedule the meeting to permit attendance at the Regional Commission banquet.

Sincerely,


Douglas P. Stanley, AICP
County Administrator

DPS
Attachment

cc: Warren County Board of Supervisors
Jennifer Berry, Clerk of Council



Front Royal-Warren County
Rivers of Opportunity-Mountains of Success



~ AGENDA ~
**TOWN/COUNTY LIAISON
COMMITTEE MEETING**
Town Administration Building
102 E. Main Street



Thursday, March 17, 2016
6:00 p.m.

- **Call Order to Order, Timothy Darr, Mayor of Front Royal**
 1. Local Labor Joint Resolution
 2. Update of Corridor Agreement Pertaining to Funding from Warren County
 3. Leach Run Parkway
 4. Wastewater Treatment Plant/Septage Receiving Facility
 5. Building Inspections Software
 6. Development Review Committee
 7. McKay Property Update
 8. Warren County's in-Town Projects
 9. Avtex Property - Main Street Extension
 10. Main Street Application
 11. Town Commercial Waste Tipping Fee Structure
 12. Chris Ramsey Boundary Adjustment Request
- **Adjournment**

7



Item No. __7__

Town of Front Royal, Virginia Work Session Agenda Form

Date: July 5, 2016

Agenda Item: Planning Commission Term Expires

Summary: Deborah Langfitt's term on the Planning Commission will expire August 31, 2016. She has asked to be considered for re-appointment. The Planning Commission has 4-year terms.

Council Discussion: Council is requested to direct Staff on their desired action.

Staff Evaluation: N/A

Budget/Funding: N/A

Legal Evaluation: N/A

Staff Recommendations: N/A

Town Manager Recommendation: N/A

Council Recommendation:

☐ Additional Work Session ☐ Regular Meeting ☐ No Action

Consensus Poll on Action: ____ (Aye) ____ (Nay)

Work Session

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