

Request for Proposals

Design and Specifications for a 230-115 kV Point of Delivery Substation, Greenville 230 South.

For

GREENVILLE UTILITIES COMMISSION

Of the City of Greenville, North Carolina

401 South Greene Street Greenville, North Carolina 27834

Issue Date May 1, 2014

Response Due Date, May 30, 2014 5:00 pm (EDST)

GREENVILLE UTILITIES

REQUEST FOR PROPOSALS

The Electric Department of Greenville Utilities requests proposals for professional consulting services for designing a 230-115 kV Point of Delivery Substation.

PROPOSAL DEADLINE

Proposals, subject to the conditions made a part hereof, will be received by the Director of Electric Systems, Greenville Utilities Engineering Center, 801 Mumford Road, Greenville, N.C., 27834 no later than **5:00 PM (EDST) on May 30, 2014.**

PREPARATION OF PROPOSAL

Proposals must be in sealed envelopes clearly marked on the outside with the name of the proposal and the proposal receipt date and time. Proposals shall be addressed to the **Director of Electric Systems**, **Greenville Utilities Engineering Center**, **801 Mumford Road**, **Greenville**, **N.C.**, **27834**.

EVALUATION CRITERIA

Vendor selection shall be based on evaluation and rating of Vendor's demonstrated competence and qualifications/performance for the type of services/products to be offered. The following guidelines will be used as minimum criteria for rating the Vendor:

- 1. The quality of references from past customers of vendor.
- 2. Quality of approach and methodology that demonstrates an understanding of the requirements.
- 3. Quality, extent and relevance of vendor's staff / experience in conducting service(s).
- 4. Vendor's response time for service(s).
- Overall cost

EVALUATION AND AWARD

GUC reserves the right to reject any and all proposals, to waive any and all informalities, and to disregard all nonconforming or conditional proposals or counter proposals. In evaluating proposals, GUC shall consider whether the proposals comply with the prescribed requirements, plus all alternates or options requested. GUC reserves the right to include or exclude any option or alternative(s). GUC is not obligated to accept the lowest cost proposal. If interviews are necessary, interviews with selected respondents will be scheduled and conducted. If a proposal is to be awarded, it will be awarded to the best qualified responsible, responsive respondent whose evaluation by GUC indicates that the award will be in GUC's best interests.

[Balance of page left blank intentionally]

MINORITY BUSINESS PARTICIPATION PROGRAM

GUC has adopted an Affirmative Action and Minority and Women Business Enterprise Plan (M/WBE) Program. Firms submitting a proposal are attesting that they also have taken affirmative action to ensure equality of opportunity in all aspects of employment, and to utilize M/WBE suppliers of materials and/or labor.

CONFLICT OF INTEREST

In general, conflicts of interest relate to the potential for self-gain usually, but not always, of a fiscal nature. Potential for self-gain can serve to undermine the judgment or objectivity of vendors providing consultation services. A potential or actual conflict of interest exists when commitments and obligations to GUC are likely to be compromised by a vendor's other interests or commitments, especially economic, particularly if those interests or commitments are not disclosed. Not all conflicting interests are necessarily impermissible. Timely and complete disclosure of potential conflicts of interest may be a satisfactory remedy and protects the consultant from suspicion and accusations of breach of professional integrity. Vendors are asked to disclose any situation or relationship that might be regarded as potential conflict of interest with, but not limited to, their expected duties and recommendations as defined in this RFP.

VENDOR INCURRED COSTS

All costs that may be incurred to prepare proposals, attend meetings, attend site inspections, provide requested follow-up information, make formal and informal presentations, and for the entire contract negotiations process if applicable, shall be the sole responsibility of each vendor. GUC is not responsible under any circumstances for reimbursement of any costs that may be incurred by vendors during the proposal preparation, subsequent selection or negotiation stages.

PROPOSAL WITHDRAWAL

A proposer must notify GUC in writing of its request to withdraw a proposal within seventy-two (72) hours after the proposal receipt date and time, not including Saturdays, Sundays, or holidays. In order to justify withdrawal, the respondent must demonstrate that a substantial error exists and that the proposal was submitted in good faith.

AFFIRMATIVE ACTION

The Provider will take affirmative action in complying with all Federal and State requirements concerning fair employment and employment of the handicapped, and concerning the treatment of all employees, without discrimination by reason of race, color, religion, sex, national origin, or physical handicap.

MEDIATION/BINDING ARBITRATION

In the event of any dispute between the Parties, the Parties agree to submit any dispute to nonbinding mediation before a mutually agreeable Mediator prior to initiating litigation. If the Parties are unable to agree upon a Mediator within thirty (30) days after demand therefore, either Party may petition a Court of competent jurisdiction for the designation of a qualified Mediator for these purposes. Each Party shall bear its own costs and expenses of participating

in the mediation (including, without limitation, reasonable attorneys' fees), and each Party shall bear one-half (1/2) of the costs and expenses of the Mediator. Unless otherwise agreed, the Parties will hold the mediation in Greenville, North Carolina. The matters discussed or revealed in the mediation session shall not be disclosed in any subsequent litigation.

In the event the matter is not resolved in mediation, either Party may request arbitration. The parties shall jointly select an Arbitrator, and shall be bound by the decision of the Arbitrator with respect to any dispute between the parties with respect to this Agreement. If the parties are unable to mutually agree upon an Arbitrator, the Parties shall each select an Arbitrator, and the two Arbitrators so selected shall select a third Arbitrator, and the decision of the majority of the Arbitrators shall be conclusive and binding upon the Parties. The Parties at all times agree to equally split the costs of any Arbitrator(s) selected in an effort to resolve the dispute between the Parties. Any party desiring to resolve a dispute under the terms of this Agreement shall notify the other Party in writing, and the Parties shall seek to agree upon a mutually agreed upon Arbitrator within a period of ten (10) days from the date of such written demand. If the Parties are unable to agree within such ten (10) day period, the Parties shall each select an Arbitrator, and the two (2) Arbitrators so selected shall select a third Arbitrator within fifteen (15) days from the date of the written demand for arbitration, and a decision shall be rendered by the Arbitrator(s) so selected within five (5) days after such Arbitrator(s) is selected.

INDEMNITY PROVISION

Provider agrees to indemnify and save GREENVILLE UTILITIES COMMISSION of the City of Greenville, Pitt County, North Carolina, and the City of Greenville, North Carolina, its co-owners, joint ventures, agents, employees, and insurance carriers harmless from any and all losses, claims, actions, costs, expenses including reasonable attorney fees, judgments, subrogations, or other damages resulting from injury to any person (including injury resulting in death), or damage (including loss or destruction) to property of whatsoever nature of any person arising out of or incident to the performance of the terms of this Contract by Provider, including, but not limited to, Provider's employees, agents, subcontractors, and others designated by Provider to perform work or services in, about, or attendant to, the work and services under the terms of this Contract. Provider shall not be held responsible for any losses, expenses, claims, subrogations, actions, costs, judgments, or other damages, directly, solely, and proximately caused by the negligence of Greenville Utilities Commission of the City of Greenville, Pitt County, North Carolina. Insurance covering this indemnity agreement by the Provider in favor of Greenville Utilities Commission of the City of Greenville, Pitt County, North

GOVERNING LAWS

All contracts, transactions, agreements, etc., are made under and shall be governed by and construed in accordance with the laws of the State of North Carolina.

ADMINISTRATIVE CODE

Bids, proposals, and awards are subject to applicable provisions of the North Carolina Administrative Code.

CONFIDENTIAL INFORMATION

Except as provided by statute and rule of law, GUC will keep trade secrets which the Provider does not wish disclosed confidential. Each page shall be identified in boldface at the top and

bottom as "CONFIDENTIAL" by the Provider. Cost information shall not be deemed confidential. The determination of whether a matter is confidential will be determined by North Carolina law.

GOOD FAITH STATEMENT

All information provided by GUC in this RFP is offered in good faith. Individual item(s) are subject to change at any time. GUC makes no certification that any item(s) are without error. GUC is not responsible or liable for any use of the information or for any asserted claims.

[Balance of page left blank intentionally]

E-Verify

AFFIDAVIT

STATE OF NORTH CAROLINA

GREENVILLE UTILITIES COMMISSION

I have submitted a bid for contract or desire to enter into a contract with the

NOW COMES Affiant, first being sworn, deposes and says as follows:

Greenville Utilities Commission:

[OFFICIAL SEAL]

My Commission Expires: _____

	As part of my duties and responsibilities pursuant to said bid and/or contract, I attest re of and in compliance with the requirements of E-Verify, Article 2 of Chapter 64 of colina General Statutes, to include (mark which applies):		
	After hiring an employee to work in the United States I verify the work authorization of said employee through E-Verify and retain the record of the verification of work authorization while the employee is employed and for one year thereafter; or		
	I employ less than twenty-five (25) employees in the State of North Carolina.		
are in complia	As part of my duties and responsibilities pursuant to said bid and/or contract, I attest to f my knowledge any subcontractors employed as a part of this bid and/or contract ince with the requirements of E-Verify, Article 2 of Chapter 64 of the North Carolina tes, to include (mark which applies):		
_	After hiring an employee to work in the United States the subcontractor verifies the work authorization of said employee through E-Verify and retains the record of the verification of work authorization while the employee is employed and for one year thereafter; or		
	Employ less than twenty-five (25) employees in the State of North Carolina. Specify subcontractor:		
This the	day of, 2014.		
	Affiant		
Sworn to and	subscribed before me, this the day of 2014		

_____, Notary Public

CONTACT INFORMATION

Questions regarding this Request for Proposal should be directed to Ken Wade, Substation/Control Engineer at (252)-551-1570, wadekr@guc.com.

1.0 Project Scope

The project scope consists of the design, bidding and contract administration of a 230 kV point of delivery substation for Greenville Utilities. The substation will be located at 2646 Mills Road, Greenville North Carolina 27858.

1.1 The Point of Delivery substation, G230 POD #3, will take delivery from the Duke Energy Progress (DEP) 230 kV transmission line, Kinston-Greenville 230 kV, which intersects the property. The voltage will be stepped down to 115 kV through a 120/160/200 MVA autotransformer with plans for a second future transformer. The substation will utilize two buses with a tie breaker to serve two circuit breakers with two future circuit breakers. These circuit breakers will interconnect with Greenville Utilities' 115 kV system.

The professional services that you consider in your proposal shall include but not be limited to the Requirements under Section 3.0.

2.0 Background Information on Greenville Utilities

2.1 <u>Geographic Location, Socio-Economic Characteristics</u>

Greenville is located in Pitt County in the Coastal Plain region of eastern North Carolina. It is approximately 85 miles east of the state capital of Raleigh.

In 2013, the population of Greenville was approximately 86,000 with Pitt County being 173,000. The county is supported by industries such as DSM Pharmaceuticals, NACCO, ASMO and Grady White boats. Along with industries, Greenville is home to East Carolina University and the East Carolina School of Medicine. Pitt County Memorial Hospital is a regional hospital supporting the medical needs throughout eastern North Carolina. A complete socio-economic analysis of Greenville and its environs is available in the City of Greenville Comprehensive Plan.

2.2 <u>Greenville Utilities Commission</u>

The Greenville Utilities Commission was initially chartered by the North Carolina General Assembly in 1905. The latest amendment to the Charter occurred in 1992. It is organized as an independent agency of the City of Greenville and operates the City's electric, water, sewer and gas utilities. Each of the four utilities is required to be accounted for through four individual budgets.

The Commission members are appointed by the City Council. Five members represent the City and two members represent the County. The members are appointed on three- year staggered terms with eligibility for an additional three-

year appointment. The City Manager serves as the eighth and full voting member of the Board of Commissioners.

Greenville Utilities' budget for fiscal year 2013-14 is \$281,225,218 and is incorporated as a part of the City of Greenville's annual budget.

The Commission presently employs approximately 430 people in nine departments.

2.3 The Electric Department

The total budget for fiscal year 2013-14 of the Electric Fund is \$196,576,986 with Capital Outlay being \$4,663,018.

The Electric Department presently employs approximately 138 people in seven sections: administration, engineering, substation and controls, distribution, systems dispatch, load management and meter.

The Electric Department serves the citizens of Greenville and approximately 75% of surrounding Pitt County. We have the second largest public power system in the state in terms of both the number of customers served and quantity of electricity purchased and distributed.

Greenville Utilities is a member of the North Carolina Eastern Municipal Power Agency (NCEMPA) and participates in the purchase of electricity from generation facilities jointly owned by NCEMPA and CP&L. As the largest of the 32 cities participating in NCEMPA, Greenville holds a 2.6% individual interest in the facilities, which provide base load power to the NCEMPA membership. As a group, NCEMPA holds a 16% interest in these units.

Greenville Utilities takes delivery from Duke Energy Progress at 230 kV from two locations. Greenville Utilities steps the voltage down to 115 kV and delivers power to various distribution substations on six transmission circuits. The delivery substation is designed with transformer differential, bus differential, breaker failure, bus overcurrent and circuit overcurrent protection. The distribution substations are designed with transformer differential protection, bus breaker protection and a main-and-transfer bus scheme.

Greenville Utilities operates and maintains 33 miles of 115 kV transmission and 30 miles of 34.5 kV sub-transmission lines. We also operate 1,400 miles of 12.47 kV overhead distribution lines and 950 miles of 12.47 kV underground distribution lines. In addition, the department maintains 19 distribution substation sites with combined base rating capacity of 560 MVA, two subtransmission sites (115-34.5 kV) at a combined base rating capacity of 50 MVA, and two 115 kV transmission substations with a combined base load capacity of 480 MVA.

GUC distributes electricity to 65,000 customers with an annual peak demand of 350 MW. Refer to Appendix A for additional information on system layout and statistics.

3.0 Requirements for G230 POD#3 Substation

- 3.1 The engineering firm will work directly with Greenville Utilities' Substation and Controls Engineer, Ken Wade.
- 3.2 Project Coordination between Greenville Utilities, DEP and NCEMPA.
- 3.3 Substation Design & Engineering will include but not be limited to:
 - 3.3.1 230 kV transmission tap configuration
 - 3.3.2 Substation Bus Arrangement
 - 3.3.3 Foundation Design and Plans
 - 3.3.4 Protective Relaying Design
 - 3.3.5 Control House Design and Plans
 - 3.3.6 Oil Containment Design and SPCC Plans
 - 3.3.7 115 kV transmission exit circuit configuration
 - 3.3.8 Ground Grid Design and Plans
 - 3.3.9 Equipment Interconnection Design and Plans
- 3.4 Substation Component Specifications, Bidding and Contract Administration will include but not be limited to:
 - 3.4.1 Equipment Specifications for circuit Switchers, breakers, transformers, protective relaying, and remote communications
 - 3.4.2 Structural Specifications for steel, switchers, sensing equipment, control house and poles.
 - 3.4.3 Labor Specifications for transmission, foundations, oil containment and control house.
- 3.5 Greenville Utilities will be responsible for the following.
 - 3.5.1 Landscaping
 - 3.5.2 Fencing
 - 3.5.3 Site Clearing/Grading Contractor
 - 3.5.4 Site Construction Coordination. GUC will install structural steel, bus, grounding, conduits, control wire terminations, and equipment.
 - 3.5.5 Startup Testing

4.0 Selection Criteria

The following information must be included in your proposal in order for it to be considered responsive.

4.1 Project Experience

- 4.1.1 A detailed description of comparable engineering experience with similar projects and clients for whom such services have been provided. A contact person and telephone number must be included in listing of previous clients.
- 4.1.1 Provide a 3 line diagram from a previous substation project.
- 4.1.2 Provide a site plan and sectional/elevation drawing with accompanying material list from a previous substation project.
- 4.1.3 Provide a transmission structural elevation drawing from a previous project.

4.2 Classification of Services

- 4.2.1 Provide a listing of all the group classifications that will be involved with this project.
- 4.2.2 Provide a listing of any subcontractors that you may utilize (such as surveyor, geotechnical and/or other specialists).
- 4.2.3 Provide a profile of your professional engineering team that will be involved in this project.

4.3 Project Schedule

- 4.3.1 Define the individual project tasks to be completed in the scope of the total project.
- 4.3.2 Provide a time schedule, which the firm will meet, for each project task from initiation through completion.
- 4.3.3 Provide the classification involved in each of the tasks.

4.4 Estimated Labor-Hours

- 4.4.1 Provide the estimated Labor-Hours for each defined project task by classification.
- 4.4.2 Provide a sub-total of Labor-Hours by project task.
- 4.4.3 Provide a sub-total of Labor-Hours by classification for the complete project.
- 4.5 Special considerations, conditions, or other pertinent circumstances you foresee affecting this work.

5.0 Proposal Process

- 5.1 The engineering proposals are to be received in the office of the Director of Electric Systems, Greenville Utilities Engineering Center, 801 Mumford Rd, Greenville, NC no later than 5:00 PM (EDST) on May 30, 2014. All firms submitting proposals must be duly licensed to practice engineering in the State of North Carolina.
- 5.2 Greenville Utilities' engineering staff will review the proposals and select three firms for a 90 minute presentation/interview. The engineering firm will have one week to prepare for the presentation/interview. The interview will consist of 30 minutes for presentation and 60 minutes for question and answer.
- 5.3 Greenville Utilities desires to negotiate an engineering contract with the selected consultant by June 30, 2014.

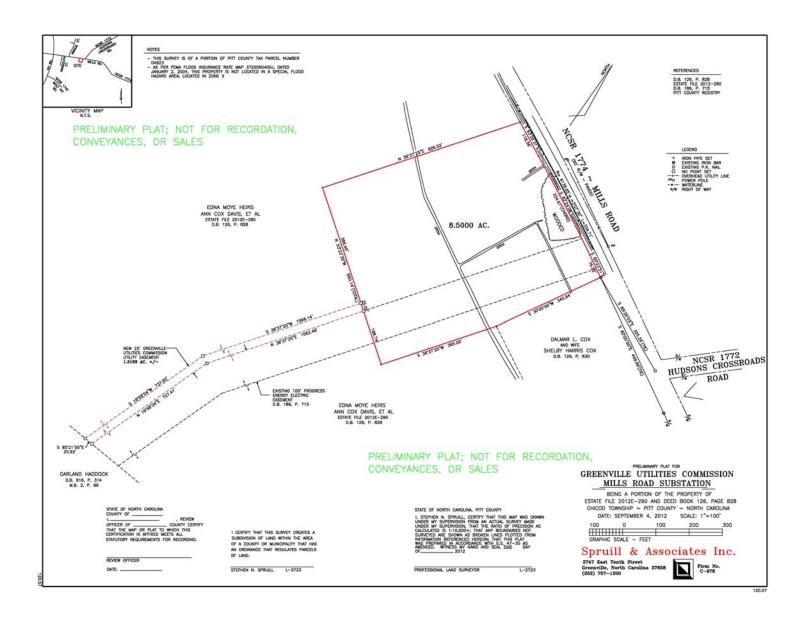
Appendix A – System Layout and Statistics

Refer to the following drawing for system layout with corresponding Item Number.

Item	Units	Substations	Combined (MVA)
Α	4	230-115 kV Transmission Substations	480
В	2	115-36.5 kV Sub-transmission Substations	50
С	28	115-12.47 kV Distribution Substations	535
D	2	36.5-12.47 kV Distribution Substations	25

Item	Lines	Miles
G	230 kV Transmission	1
Н	115 kV Transmission	33
I	36.5 kV Subtransmission	30
J	12.47 kV Overhead Distribution	1400
K	12.47 kV Underground Distribution	950

Item	Customer Class	Number
L	Large General Service	33
M	Medium General Service	1051
N	Small General Service	6457
0	Residential	57002
	TOTAL	64543



It is certified that this proposal is made in good faith and without collusion or connection with any other person responding on the same above listed items. It is also certified that this proposal is made in good faith and without collusion or connection with any GUC employee(s).

Certified check or cash for \$	<u>n/a</u> or bid bond for	* \$ <u>n/a</u> attached.
Firm Name		Phone ()
Address		
City	State	Zip Code
Fax ()	_ E-Mail	
Authorized Official Тур	ped Name	Title
	Signature	Date

Three (3) copies of your proposal should be received May 30, 2014 no later than 5:00 PM (EDST)