



The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header 1

List View

General Information

Contact

Default Values

Discount

Document Information

Procurement Folder: 688128

SO Doc Code: CRFQ

Procurement Type: Central Purchase Order

SO Dept: 0211

Vendor ID: 000000200562

SO Doc ID: GSD2000000036

Legal Name: STATE ELECTRIC SUPPLY COMPANY

Published Date: 3/3/20

Alias/DBA:

Close Date: 3/17/20

Total Bid: \$127,440.00

Close Time: 13:30

Response Date: 03/17/2020

Status: Closed

Response Time: 9:56

Solicitation Description: Transfer Switchgear for AEP Project

Total of Header Attachments: 1

Total of All Attachments: 1

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Medium voltage switchgear	1.00000	EA	\$127,440.000000	\$127,440.00

Comm Code	Manufacturer	Specification	Model #
39121115			

Extended Description :	Medium voltage switchgear
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Comments: 70 days after release of material from vendor

Project Name: Chiller Plant ATS
General Order No:

Negotiation No: CR850108X0K2
Alternate No: 0000

Item No.	Qty	Product	Description
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1	EESS SAT	<p>***See Approval Drawings for Comments and Clarifications*** Start-up Contact: Contractor KEVIN DAVIS Estimated Start-up Date: A Coordination Study does not exist.</p>
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- | Qty | List of Materials |
|-----|--|
| 1 | EESS Office: Charleston, WV |
| 1 | Jobsite: , Charleston, West Virginia 25301 |
| 1 | Drive Time: 0.45 Hours |
| 1 | Weekly Site Schedule: 8 hr Days, 5 Days per Week |
| 1 | 1 Test Equipment Setup Locations |
| 1 | MVS 5/15 kV Lineups |
| 1 | 1200 A Bus |
| 1 | 5 kVA CPT |
| 2 | 1 Extra Space Heaters |
| 2 | Station Class Lightning Arresters |
| 0 | Cable Fault Indicator |
| 0 | IT Relay Single Phase |
| 0 | Addressable Relay |
| 1 | WARNING! MVS non standard product will NOT be included in the EESS test BOM. RFQ ALL product and EESS takeoffs or contact the appropriate EESS office for pricing. |
| 4 | 2 - 120/1 VTs |
| 2 | Motor Operator (5-15 kV Model) |
| 2 | 13.8 kV Switch |
| 2 | MVS Structures |
| 2 | Key Interlock w electrical contacts |
| 2 | Key Interlock |
| 1 | Space Heaters |
| 1 | IQ Auto Transfer |
| 1 | 62 inch depth based on SCR0113406-001 |

Item No.	Qty	Product	Description
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1	Medium Voltage Switches	Outdoor, 15kV Max, 13.8kV system, 3 wires, 1200A, Silver-Plated Copper bus, 2 Structures
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- | Qty | List of Materials |
|-----|---|
| 1 | 62 inch depth based on SCR0113406-001 |
| 2 | Outdoor Enclosure |
| 2 | Copper silver plated bus |
| 2 | 1200A Copper silver plated main bus |
| 2 | 15kV Switch 600A, 61kA mom, 61kA fc |
| 1 | Freight on Board |
| 2 | Motor Operator |
| 2 | 1 Key Interlock |
| 2 | 1 Key Intelock w/ Electrical Contacts |
| 2 | Auxiliary Switch |
| 1 | Steel cable support |
| 2 | Set(s) of 12KV Station class surge arrester |
| 4 | Voltage transformer |
| 1 | 5KVA Control power transformer |
| 2 | 1 Space heater per Structure |



Detail Bill of Material

Project Name: Chiller Plant ATS
General Order No:

Negotiation No: CR850108X0K2
Alternate No: 0000

Qty	List of Materials
2	Non-Diff-Fix-Point
2	Circuit breaker for space heater
2	Indicating light LED
1	2 Switch Auto Transfer
1	Total Freight Price

Eaton Selling Policy 25-000 applies.

All orders must be released for manufacture within 90 days of date of order entry. If approval drawings are required, drawings must be returned approved for release within 60 days of mailing. If drawings are not returned accordingly, and/or if shipment is delayed for any reason, the price of the order will increase by 1.0% per month or fraction thereof for the time the shipment is delayed.

Eaton Site Acceptance Testing Services

Notes

Customer Contact Information (name, phone, e-mail):

Preliminary Schedule (when these services are required):

Describe any special site conditions:

Describe any special testing requirements:

If airfare is included, define origin & destination:

If material are included, define materials to be purchased:

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Comments & Clarifications

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Testing Clarifications

- Standard factory warranty coverage is extended by 12 months, on Eaton manufactured equipment, when site acceptance testing is performed by Eaton's Electrical Engineering Services & Systems (EESS).

- All testing will be performed by Eaton's Electrical Engineering Services & Systems (EESS) per Eaton's standard testing guidelines unless otherwise specified.

- If NETA testing is specified, and provided by Eaton, Eaton takes exception to NETA certification and membership or Nationally Recognized Testing Laboratory (NRTLs) requirements. Eaton field personnel are certified to test power distribution equipment per IEEE, NEMA, NFPA and NETA standards by the National Institute for Certification in Engineering Technologies (NICET) Electrical Power Testing Certification Program. This program provides an independent verification of the capabilities, knowledge and experience of our field personnel for electrical testing. The Electrical Power Testing certification program is for technicians who test equipment used in the production, transmission, and distribution of electrical power. These technicians are engaged in inspection, testing, and periodic maintenance of electrical power equipment, and evaluation of such equipment for acceptance for service, continued serviceability, or required maintenance.

- Testing will be completed on the specific electrical equipment, whereas, if not clearly identified, circuit breakers below 200 amperes and transformers below 75kVA are not tested.

- All test results will be evaluated in accordance with manufacturer's published data where available.

- No "Optional" NETA tests are included.

- Customer to provide settings for protective devices and relay input/output logic if Eaton has not performed the power system studies for the facility. Note: Eaton can provide an adder for the required power system studies.

- If Eaton has quoted cable testing in the BOM, cable tests are performed with the cables disconnected from their normal position.

- If Eaton has quoted cable testing in the BOM, the customer should provide a safety watch at the opposite end of the cables to be tested.

- If Eaton has quoted cable testing in the BOM, the ends of the cables to be tested should NOT be taped up so that the ends are easily accessible.

- All liquid filled transformers listed in the BOM will have oil samples tested per the following: The DGA test is tested per ASTM D-3612 and the GQ oil test is tested per the following: Moisture content (ASTM D-1533b), Interfacial Tension (ASTM D-971), Acid Number (ASTM D-974), Color Number & Visual Exam (ASTM D-1500, 1524), Dielectric Breakdown (ASTM D-877), & Specific Gravity (ASTM D-1298).

- No load bank testing is included with the testing of any battery systems listed in the Eaton BOM.

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Specification Clarifications

- Specification Section #####

- Specification Section #####

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General Clarifications

- Method of procedure (MOP) development or meeting time not outlined in the scope of work will be treated as an

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	KEVIN DAVIS	3/16/2020			
	APPROVED BY	DATE	JOB NAME	Chiller Plant ATS	
			DESIGNATION		
	VERSION	TYPE	DRAWING TYPE		
	1.0.0.0	EESS	Customer Appr.		
NEG-ALT Number	REVISION	DWG SIZE	G.O.	ITEM	SHEET
CR850108X0K2-0000		A			1 of 4

extra.

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Customer will be responsible for the following:

- Provide a stable 1P, 480V, 100A source of power capable of supplying power to Eaton's Primary Current Injection test set. If not, generator rental fees will apply and will be billed separately from the dollar amount listed herein.
- Identify site contact for this project.
- Work together with Eaton on scheduling work.
- Customer will supply a complete set of electrical plans, including the plant single-line diagram, specifications, and any pertinent change orders that may impact the acceptance testing of the equipment to Eaton before commencement of work.
- Provide plant personnel to work with Eaton test engineers as required during the planning phase and during the on-site testing phase.
- Customer shall supply a suitable and stable source of power for operation of test and motorized equipment at each test site when normal power is removed or authorize Eaton to obtain a source of auxiliary power. Eaton shall specify requirements. Any non-standard generators rentals will result in a price adder to this proposal.
- Provide manufacturers maintenance manuals and tools (normally supplied with equipment) to Eaton for equipment prior to outage.
- All equipment shall be set in place and assembled prior to arrival on site for acceptance testing. Coordination on site during equipment installation and assembly can be provided as a separate order at the quoted hourly rates.
- The customer will coordinate all outages and perform all switching to de-energize and isolate equipment to be tested.
- The customer shall make all equipment available immediately upon arrival of Eaton personnel, including removal from service to permit continuous progression of work. Delay time in making equipment available will be treated as an extra.
- Provide crane and operator if required.
- Provide a secure storage area for any removed equipment, test equipment and materials.

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Eaton Responsibilities:

- Provide a project manager as a single point of contact that will work directly with customer personnel to create and manage the schedule and outages.
- Organize team meetings and establish safety procedures in accordance with your plant protocol.
- Survey project including electrical equipment contained within our scope of services.
- Meet as a project team to finalize schedule and establish staging areas for plant approval.
- Shall furnish test engineers, tools, equipment, materials, supplies and transportation.
- Provide and install safety locks, as required.
- Perform voltage test and install necessary circuit / equipment safety grounds to assure safe working conditions.
- Make necessary minor adjustments required to bring equipment to satisfactory operating condition.
- Obtain authorization in advance before performing any extra work.
- Upon completion of work:
 - 1) Remove safety grounds installed by Eaton
 - 2) Remove safety locks installed by Eaton
- Provide detailed written reports on the condition of the equipment "as found" and "as left".

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Terms:

Any order arising out of this offer will be governed by the conditions contained in Eaton Selling Policy 25-000 for US work, or 25-000C for Canada, unless both parties mutually agree to other terms and conditions in writing. This offer is valid for 30 days unless otherwise extended, modified, or withdrawn, in writing, by Eaton.

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Safety Training of Eaton Field Personnel:

All Eaton field personnel receive training to comply with OSHA CFR1910.269 Electrical Safety Standard for US work, or Eaton Safety Standard for Canada, which sets minimum safety rules and practices for the design,

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	APPROVED BY	DATE	JOB NAME Chiller Plant ATS	DESIGNATION	
	VERSION 1.0.0.0	TYPE EESS	DRAWING TYPE Customer Appr.		
NEG-ALT Number CR850108X0K2-0000	REVISION	DWG SIZE A	G.O.	ITEM	SHEET 2 of 4

operation, and maintenance of high-voltage systems (over 600 volts). Safety standards are in place to meet or exceed NFPA 70E requirements, and appropriate Personal Protective Equipment (PPE) has been issued. Customer required safety training for Eaton personnel, beyond the time specified in the Bill of Material will be charged at the standard rates.

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Safety Clarifications:
 - Eaton will not perform work activities in situations where the proper level of PPE is not practical. At no time will work be performed when the arc-flash exposure levels are above 40 cal/cm2.
 - Customer shall be responsible to perform all switching. Any requirement of Eaton for perform switching will require customer signature and a minimum of two EESS personnel present. Additional charges will apply.

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On Site Customer Training Time:
 - All training listed in the Eaton BOM is provided during normal business hours (8AM - 5PM) at straight time prices. Any training which occurs during overtime hours will result in a price adder.
 - Customer to provide classroom for onsite training if listed in the Eaton BOM. Customer to make equipment available for onsite training.
 - Requests for videotaping of Eaton provided training will require signature of Eaton release form by end customer.

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Communication Packages:
 Configuration and testing of communication devices is not included in site acceptance testing.

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Lifts:
 The customer will need to supply any type of lift to mobilize equipment on site and the customer will supply personnel lifting equipment, if required. Any additional lifts supplied by Eaton will result in a price adder.

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Extended Warranty:
 Standard factory warranty coverage is extended by 12 months, on Eaton manufactured equipment, when site acceptance testing is performed by Eaton's Electrical Engineering Services & Systems (EESS).

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Overtime:
 If straight time work is required to be performed on an overtime basis, Customer will be billed the difference between the straight time and overtime rate. Saturday overtime rate applies to all time worked in excess of eight (8) hours / day Monday through Friday and all time worked on Saturday. Sunday / Holiday overtime rate applies to all time worked on Sundays and Holidays.

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Delay time:
 If Eaton arrives onsite to perform scheduled work and the work is cancelled, Eaton will charge Customer four (4) hours minimum per person, plus travel expenses if no replacement work can be scheduled. If sufficient notice (72 hours) is given to Eaton when canceling scheduled work, no extra charge will apply. Weather delays may be considered as an extra, if required. Weather delays may increase the estimated completion time.

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Outside personnel:
 If Eaton is required to bring additional personnel in from outside the area the following travel policy will be in effect: Travel will be based on portal-to-portal time not to exceed 8 hours at the quoted hourly rate per hour plus travel expenses at cost plus 25 percent.

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Stand-by & re-connect fees:
 Applicable fees for outage related costs including stand-by and re-connect services are not included.

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Rates for Additional Work:
 Field Service Specialist Straight Time - \$276.00 per hour

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NEG-ALT Number CR850108X0K2-0000	REVISION	DWG SIZE A	G.O.	ITEM	SHEET 3 of 4

Field Service Specialist Over Time - \$414.00 per hour
 Field Service Specialist Sunday/Holiday Time - \$552.00 per hour
 Field Service Technician Straight Time - \$218.00 per hour
 Field Service Technician Over Time - \$328.00 per hour
 Field Service Technician Sunday/Holiday Time - \$437.00 per hour

Comments and Clarifications

See above.

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	<p>APPROVED BY</p>	<p>DATE</p>	<p>JOB NAME Chiller Plant ATS</p>	<p>DESIGNATION</p>	
	<p>VERSION 1.0.0.0</p>	<p>TYPE EESS</p>	<p>DRAWING TYPE Customer Appr.</p>		
<p>NEG-ALT Number CR850108X0K2-0000</p>	<p>REVISION</p>	<p>DWG SIZE A</p>	<p>G.O.</p>	<p>ITEM</p>	<p>SHEET 4 of 4</p>

General Information

Switchgear Design Type

Design Type: MVS

Switchgear Rating

Voltage Class: 15
 System Voltage: 13.8
 Symm Short Circuit: 40
 BIL: 95 KV
 Number of Wires: 3
 System Ground: Solid
 3rd Party Cert: UL

Bus Specifications

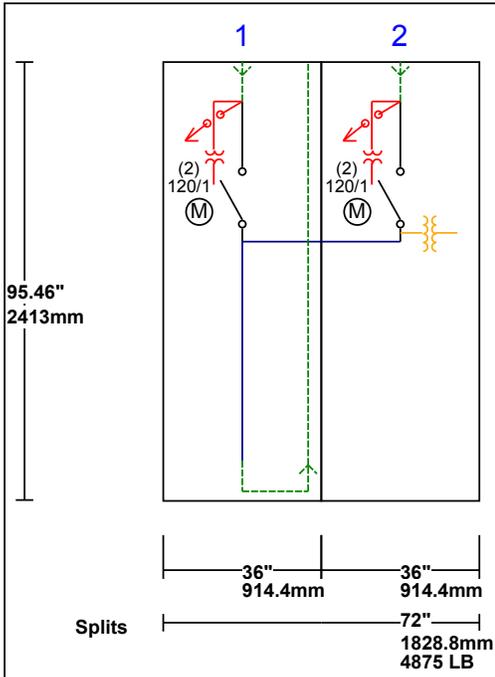
Bus Material: Silver-Plated Copper
 Ground Bus Material: Cu
 Bus Bracing, kA RMS Sym: 40
 Main Bus Amps: 1200
 Bus Support Ins: Polyester Finned

Enclosure Info:

: Outdoor
 Int. Color: ANSI-61 Light Gray
 Ext. Color: ANSI-61 Light Gray

Structure Modifications

Modification **Str #s**
 Sw Wdw; Acrylic Plasti 1,2
 Aux. Switch 1,2
 Aux Location; Switch 1,2
 Space Heaters 1,2
 Therm; Non-Diff-Fix-Pc 1,2
 Heater Brkr 1,2
 Indicator light 1,2
 Drive Rod; Glass Poly 1,2
 Gnd Lug; Clamp Lugs 1,2
 Gnd Size; #6-350mcn 1,2
 Gnd Qty 1,2



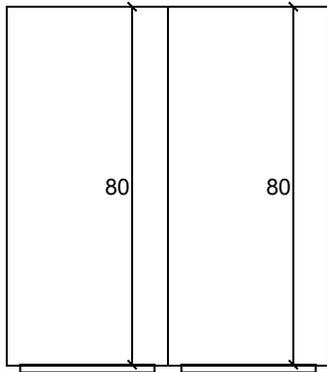
Structure	1	2		
Depth	80	80		
Switch Rating	600	600		
Momentary Rating	61	61		
NP Integ. Rating	40	40		
FUSE OR VCB	Class			
	Type			
	Amps			
	Spare			
CABLE IN	Size	NEMA	NEMA	
	#/PH	2	2	
	Term Type	None	None	
CABLE OUT	Size	NEMA		
	#/PH	2		
	Term Type	None	None	
(Qty) CT Ratio				
(Qty) VT Ratio		(2) 120/1	(2) 120/1	
CPT Rating (kVA)		None	5	
SURGE ARREST	KV	12.0	12.0	
	TYPE	Station	Station	
KEY INTER-LOCK inter-changes	QTY	1 Manu. & 1 Elec.	1 Manu. & 1 Elec.	
	SCHEME	ISA019	ISA019	
	LO	K1	K1	
	LD	K1	K1	
	LC			

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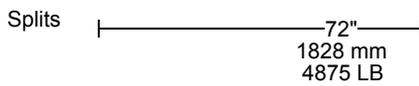
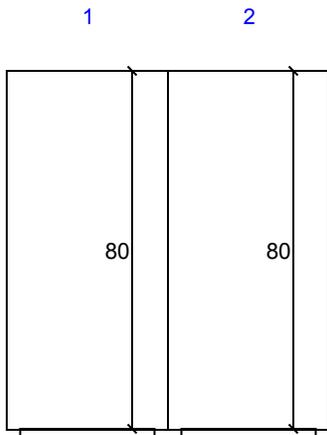
NEG-ALT Number
CR850108X0K2-0000

PREPARED BY CR85	DATE 3/16/2020	Eaton Greenwood, SC		
APPROVED BY	DATE	JOB NAME Chiller Plant ATS		
VERSION 7.3.17.0		DESIGNATION Medium Voltage Switches		DRAWING TYPE Customer Appr.
REVISION 0	DWG SIZE A	G.O.	ITEM	SHEET 1 of 2

Roof Plan
Rear



Floor Plan
Rear



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PREPARED BY CR85	DATE 3/16/2020	Eaton		Greenwood, SC	
APPROVED BY	DATE	JOB NAME Chiller Plant ATS	DESIGNATION		
VERSION 7.3.17.0	TYPE Medium Voltage Switches	DRAWING TYPE Customer Appr.			
NEG-ALT Number CR850108X0K2-0000	REVISION 0	DWG SIZE A	G.O.	ITEM	SHEET 2 of 2