CITY OF HIGH POINT AGENDA ITEM



TITLE: Generator for the Oak Hollow Raw Water Pump Station
Carolina CAT

FROM: Robby Stone, Public Services Director
Derrick Boone, Asst. Public Services
Director

PUBLIC HEARING: N/A

ATTACHMENTS: Quote - Catepillar
Quote - RussElectric

PURPOSE: To purchase a diesel generator and automatic transfer switches that will be installed at the Oak Hollow Raw Water Pump Station for backup emergency power.

BACKGROUND: The Oak Hollow Raw Water Pump Station has historically been used as a back-up raw water source for water treatment. With the upcoming dam replacement project at Arnold Koonce City Lake and the recent change to water quality standards by the Environmental Protection Agency regarding perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS), the Oak Hollow Raw Water Pump Station will be utilized as the city's primary drinking water source and must have a reliable backup emergency power system. The CAT generator and Russelectric automatic transfer switches have a 67-week lead time and will be installed as part of a future construction project.

BUDGET IMPACT: Funds for this project are available in the FY 2023-2024 budget.

RECOMENDATION/ACTION REQUESTED: The Public Services Department is requesting approval to purchase the diesel generator and automatic transfer switches which were competitively bid from Carolina CAT through the Sourcewell cooperative purchasing contract for a total amount of \$1,086,710 and authorize the appropriate City Official(s) to execute all necessary documents.







Quote No.: 31208897 HIGH POINT SOURCEWELL 18103 Issue Date: 4/24/2024

Project Name: City of High Point, Oak Hollow Valid For: 30 days

Project Location: High Point, NC

GENERATOR SET, DIESEL & RUSSELECTRIC ATS

- 1 Caterpillar Model C32 STOCK
 - · Generator Set:
 - 1250kW Standby Rating
 - 87.4 GPH @ full load / 71.0 GPH @ 75% load
 - U.S. EPA Stationary Emergency Use Only (Tier 2)
 - 480V, 3 phase, 4 wire, wye connected, 60 Hz
 - · UL2200 certified & NFPA 110 compliant
 - · EMCP 4.2B control panel
 - Right hand mounted with local NFPA-99/110 alarm module, installed
 - One (1) Remote NFPA alarm annunciation panel, shipped loose
 - · Alternator
 - Insulation class: H
 - Random Wound, 2/3 Pitch with PMG and strip heater
 - · Radiator
- Unit mounted with engine driven fan
- 50/50 coolant
- 48C/118F
- Sight glass for level indication
- · Power Termination
 - MP 2,000A LSIG (right hand mounted, bottom fed)
 - 250A Circuit breaker
 - 250A circuit breaker
- · Engine
- Air cleaner
- Charging alternator
- Motor starter, 50MT 24VDC
- 20A Battery charger
- Lead acid battery sets, racks, cables (2-12V batteries, 1400CCA, 200 ampere hours)
- 204V 9kW Jacket water heater
- Spring type isolators w/integral seismic restraint
- Factory test report 0.8PF
- 5-yr Factory Warranty

1 CUSTOM ENCLOSURE & TANK (Please see BOM at end of quote)

75dba @ 23ft Weatherproof Enclosure:

- UL 142 Subbase Tank, 48 hour fuel tank
 - 4,257 usable gallons, when filled to 90% capacity
- Free standing stair package
- Electrical package
- Enclosure Dimensions:
 - 432"L x 114"W x 114"T
- Tank Dimensions:
 - 360"L x 114"W x 35"T
- Stairs/Platform Dimensions:
 - 144"L x 42"W



1 RUSSELECTRIC MEDIUM VOLTAGE TRANSFER SWITCH (Please see BOM attached)

- 1200A, Two Section Layout
- Section 1:
 - GMSG 1200A 5kV 40kA Siemens Breaker (52-U)
 - GMSG 1200A 5kV 40kA Siemens Breaker (52-E)
 - No Neutral
- Section 2:
 - Transition Cubicle
 - Fiber Converter
- NEMA 3R
- Accessories
 - Siemens Protective Relays
 - Portable MV breaker lift device

2 RUSSELECTRIC TRANSFER SWITCHES (Please see BOM attached)

- Delayed Transition
- 260A
- 3 Cycle
- 277/480V, 3Ph
- Switched Neutral
- NFMA 3R
- Accessories
 - Power Monitoring
 - Status Relay Bundle.
 - Strip Heater within ATS.
 - Ethernet Module.

LOT MISCELLANEOUS

- · Equipment delivery to job site; off-loading & installation by others
- · Onsite equipment start-up with 4 hour load bank test included
- $\cdot \, \text{Storage for a year} \,$
- · 5-year warranty on provided equipment

SALE PRICE: \$ 1,086,710.00 (plus any applicable taxes)

Submittal Lead Time (after receipt of PO/LOI):

Submittals: 8-10 weeks

Lead Times (after submittal approval):

Genset: Built and in storage

Enclosure/Tank: 26-28 weeks
RUSS MV ATS: 61-67 weeks
RUSS LV ATS: 35-37 weeks

Payment Terms:

Invoice on delivery of equipment. Net 30.

90% upon delivery of equipment

10% upon completion of start-up/testing

CATERPILLAR CAROLINA CAT

2 of 6

Quote Clarification/Deviations/Exclusions:

- 1. NOTE: The MV ATS will pull from the generator batteries. If station battery is wanted, please use \$ 22,730.00.
- 2. RUSS CDE on MV ATS:
 - a. MV ATS when contained within the NEMA 3R non-walk in enclosure is not seismically certified. (Requirement, if any, for seismic certification for this switchgear configuration was not included in the project specifications section 26 36 00.
- 3. CAT CDE on Generator Enclosure:
 - a. 2.10- Exclusion- Enclosure finish to be CPS standard exterior grade urethane in lieu of powder baked.
- 4. Pricing is based on stock 1250kW that is held for this project and needs a custom enclosure/tank package.
- 5. Sourcewell pricing.

1250kW ENCLOSURE BILL OF MATERIAL

Weather Resistant, Level 3 Sound Attenuated, Aluminum Enclosure:

- Approximate dimensions: 408" Long x 114" Wide x 114" Tall (estimated weight: 10,326lbs)
- Enclosure Exterior to be of .080",3003-H14 Aluminum, Formed, Panel Construction, Pre-Painted Finish (Standard Color White).
- Air Intake: Rear Air Intake Hood with Bird Screen.
- Air Discharge: Sound Attenuated Discharge Hood with Gravity Dampers and Bird Screen.
- 3" Sound Attenuating Fire Blanket in Walls and Ceilings. Insulation Retained with .050" Perforated Aluminum. Enclosure is Designed to Provide Source SPL to 75 dB (A) @ 23 Feet, in a Free-Field Environment.
- (4) 36" Single, Access Doors with Padlocking Provisions, Panic Release and Corrosion Resistant Hardware.
- Silencer Supports for CPS Furnished Interior Mounted, Internally Insulated, Critical Grade Silencer.
- Install CPS Provided Exhaust Discharge Elbow and Rain Cap.
- Install CPS Provided Exhaust Flex Connectors, Exhaust Gaskets and Bolt Kits.
- Rain Collar and Rain Shield at Exhaust Penetration in Roof.
- Extend Oil and Coolant Drains to Exterior of Enclosure.
- Extend Crank Case Disposal to Radiator Discharge (if applicable)
- Cambered Roof Design to aid in Water Shedding.
- Enclosure Suitable for 130 MPH Wind Loading
- PE Certificates are available for an additional charge

Generator Enclosure Electrical Package:

- Provide, Install and Wire (1) 480VAC;120/208VAC step down transformer.
- Provide, Install and Wire (1) 120/208V 3 Phase MCB (100A main breaker) Panel Board with Bolt-on Branch Circuit Breakers.
- Provide, Install and Wire (4) 48" LED Light Fixtures with (2) Switches Located by Entrance Doors.
- Provide, Install and Wire (2) 20A, 125V Duplex GFCI Receptacle Located by Entrance Doors.
- Wire Customer Provided and Installed Jacket Water Heaters to Panel Board.
- Wire Customer Provided and Installed Generator Strip Heaters to Panel Board.
- Mount and Wire Customer Provided Battery Charger to Panel Board and DC Output for Batteries via Termination on Starter.
- All Electrical to be Run in EMT or LFNC to meet NFPA 70.

4,900-Gallon CPS "Enviroshield Economy" ® UL 142, Subbase Fuel Tank:

- Approximate Dimensions: 360" Long x 114" Wide x 39" Tall (estimated weight: 10,500lbs)
- Capacity based on 48 hours @ 87.4gph (100% Load) 4,257 Useable Gallons
- 10ga Mild Steel Primary Tank, 7 Gauge Mild Steel Secondary Tank
- Mechanical Fuel Level Gauge (Krueger Model H)
- Supply and Return Connections
- 2" Fill with Lockable Cap with Spill Containment with Overfill Prevention Valve (Morrison 9095SA-0500AV)
- Normal and Emergency Vent Fittings Installed Per UL-142

CATERPILLAR CAROLINA CAT

- Interstitial Space with Leak Detection Switch, Wired to Generator Control Panel (final termination to terminal strip to be done by installing technician)
- High Level Fuel Alarm Switch (Madison M-7000 EQ#682) Set @ 90% Tank Capacity Wired to Generator Control Panel (final termination to terminal strip to be done by installing technician)
- Low Level Fuel Alarm Switch (Madison M-7000 EQ#682) Set @ 35% Remaining Capacity Wired to Generator Control Panel (final termination to terminal strip to be done by installing technician)
- Cable Stub Up Opening Under Circuit Breaker
- Generator Mounting Beams
- 2 Lifting Points per Side (4 Total) for Lifting Generator Set, Enclosure and Tank (Empty)
- Tank Primed with Two Part Epoxy Zinc Based Primer and Two-Part Polyester/Polyurethane Topcoat -Gloss Black.

Ship under Vacuum:

- Tank sealed and shipped under vacuum per NFPA30.
- Tank Vacuum to be Verified and Documented per NFPA-30 Immediately upon receipt and placement at the job site.

OSHA Compliant Stairs and Walkways:

- (2) Set of OSHA Compliant Stairs with Railings and 144" Long x 42" Wide Walkway with Railings
- Railings to be Constructed of 1 ½" Aluminum Tube.
- Steps and Walkways Constructed of Extruded Aluminum
- Leveling Pads

Estimated Shipping Arrangement:

- Truck 1: Generator, with Enclosure and Sub-base Fuel Tank
- Truck 2: Access Stairs, Job-Box, Exhaust Components and Ship Loose

Quotation Notes:

- 1. WE HAVE DETAILED THE EQUIPMENT PROPOSED. PLEASE REVIEW YOUR SPECIFICATIONS TO BE SURE THAT THE EQUIPMENT DESCRIBED ABOVE MEETS YOUR REQUIREMENTS.
- 2. This quotation covers items listed herein and does not constitute a specific job proposal.
- 3. All equipment furnished loose for installation by others unless specifically listed as installed.
- 4. We are quoting this equipment as a material supplier only, we do not include any offloading, installation, concrete pad, conduit, wiring, lugs, fuel, fuel piping, and other misc. hardware.
- 5. Start-Up, Testing, & Training to be performed during normal business hours unless specifically indicated otherwise.
- 6. Relay and/or System Coordination Study not included unless specifically noted.
- 7. Telephone and verbal orders are to be confirmed in writing.
- 8. We reserve the right to correct errors or omissions.
- 9. Carolina Cat is not responsible for occurrences beyond our control.
- 10. Sale is contingent upon customer signing a Carolina CAT Purchaser Agreement Form.
- 11. This quotation is made subject to Carolina Tractor Standard Terms and Conditions.
- 12. This quotation is valid for Thirty (30) days from date of issue.
- 13. Contracts which include penalties or liquidated damage clauses for failure to meet promised shipping dates are not accepted by or binding on Carolina CAT, unless accepted, and confirmed in writing by an officer of Carolina Tractor & Equipment Company at its corporate office.
- 14. Delivery dates listed above are only estimates based on current delivery times from the manufacturer(s), they are subject to change at any time. Firm delivery dates can only be obtained after equipment has been released for production by the manufacturer. Release for production occurs after submittals have been approved in writing by the customer or the customer's representative.
- 15. Lack of urgent approval of submittals may require Carolina Cat to revise pricing if the manufacturer increases prices before order is released or if lead-times are revised to where an unquoted price increase will occur before shipment.

- 1. <u>DEFINITIONS</u>. For purposes hereof, unless otherwise provided herein (i) "Company" means Carolina Tractor & Equipment Company, a North Carolina corporation; (ii) "Conditions of Sale" means the following conditions of sale which are hereby incorporated by reference in, and made a part of, the Sales Order Agreement to which these Conditions of Sale are affixed or attached; (iii) "Customer" means the individual or entity whose name appears on the face of the Sales Order Agreement; (iv) "Equipment" means the equipment and products described on the face of the Sales Order Agreement; (v) "Invoice" means any invoice sent by Company to Customer pursuant to a Sales Order Agreement; and (vi) "Sales Order Agreement" means Company's Sales Order Agreement, which is an agreement between Company and Customer.
- 2. <u>PAYMENT TERMS</u>. Customer shall pay to Company the amount listed on the face of the Sales Order Agreement or Invoice in the manner and in accordance with the terms provided on the face of the Sales Order Agreement or Invoice. If Customer fails to pay the amount listed on the Sales Order Agreement or Invoice as required, Company may, in its sole discretion, without prejudice to any other remedy, do any one or more of the following: (i) postpone shipments, (ii) alter payment terms, (iii) terminate shipments, and (iv) charge interest on all overdue amounts at the rate of 1.5% per month compounded monthly (or such lesser rate as is required by applicable law). Any and all taxes imposed by federal, state or other governmental authorities on the sale of the Equipment shall be paid by Customer in addition to the prices listed (and whether or not itemized) on the Sales Order Agreement or Invoice. Customer may not hold back, delay or set-off any amounts owed to Company in satisfaction of any claims asserted by Customer against Company.
- 3. <u>DELIVERY TERMS</u>. Unless otherwise stated on the face of the Sales Order Agreement, all delivery terms shall be Free on Board (F.O.B.) at the facility where the Equipment is manufactured, pursuant to which the risk of loss passes to Customer when the Equipment is put into the possession of a carrier. Company will use reasonable diligence to meet the scheduled delivery dates provided herein, which are estimates and not guarantees of when the Equipment will actually be delivered. Customer's acceptance of delivery shall constitute a waiver of any claim of damage for delay. All references to delivery and shipment terms are with reference to the applicable provisions of the Uniform Commercial Code in effect from time to time in the State of North Carolina.
- 4. <u>INSTALLATION</u>. Unless otherwise set forth on the face of the Sales Order Agreement, Company shall not provide (i) any offloading or installation services with respect to the Equipment, (ii) any equipment, consumables or other hardware required for the installation of the Equipment, including, without limitation, concrete pads, conduit, wiring, lugs, fuel or fuel piping or (iii) any relay or system coordination study.
- 5. <u>SECURITY INTEREST</u>. To secure the payment of the purchase price of the Equipment and all other amounts due to Company from Customer, Customer hereby grants to Company a purchase money security interest in the Equipment and in all equipment and goods hereafter sold by Company to Customer, all accounts resulting from the sale or other disposition thereof by Customer and in all instruments, documents, general intangibles, attachments and accessions related thereto and all proceeds of the foregoing, as such terms are defined in the Uniform Commercial Code in effect from time to time in the State of North Carolina. Customer hereby authorizes Company to file with the appropriate filing offices such UCC-1 financing statements and other instruments and documents as Company deems necessary to evidence and perfect the above-described security interest.
- 6. <u>TITLE</u>. Upon delivery of the Equipment to Customer's job site, the Equipment shall become the property of Customer, subject to a reservation of a security interest herein granted to Company, and any losses or damage thereto shall be borne by Customer. Customer shall obtain appropriate risk insurance for fire, theft and extended coverage including vandalism, which recognizes Company's interest.
- 7. WARRANTY. WARRANTIES WITH RESPECT TO ANY EQUIPMENT ARE MADE BY THE MANUFACTURER OF SUCH EQUIPMENT, AND, UPON REQUEST, COMPANY WILL PROVIDE A COPY OF THE APPLICABLE MANUFACTURER'S WARRANTY. COMPANY DOES NOT MAKE ANY EXPRESS OR IMPLIED WARRANTIES AS TO ANY MATTER WHATSOEVER, INCLUDING WITHOUT LIMITATION THE CONDITION OF ANY EQUIPMENT, ITS MERCHANTABILITY OR ITS FITNESS FOR ANY PARTICULAR PURPOSE, ALL OF WHICH ARE HEREBY EXPRESSLY DISCLAIMED.
- 8. **REMEDIES UPON BREACH.** If Customer breaches this contract, Company shall be entitled, in addition to any other remedy at law or equity, to recover all costs and expenses incurred by Company in connection herewith. Such costs and expenses shall include, without limitation, Company's reasonable attorney's fees, costs of labor applied to this contract, overhead, costs of any materials applied to or ordered for this contract, and any charges imposed on Company by its suppliers or subcontractors. If Company breaches this contract, Customer's exclusive remedy shall be to terminate this contract, after written notice to Company of the breach and reasonable time to cure, by written notice thereof to Company, and to receive a refund of the Sales Order Agreement amount, if previously paid, for any Equipment that have not been shipped or otherwise identified to this contract as of the date of such termination.
- 9. CANCELLATIONS. Cancellation of this contract must be in writing signed by Customer and Company. Such cancellation will be deemed to occur on the date that both parties sign the notice of cancellation. Upon such cancellation, Customer agrees to pay Company the greater of (i) thirty percent (30%) of the amount listed on the face of the Sales Order Agreement or Invoice or (ii) all costs and expenses incurred by Company in connection with this contract, including, without limitation, Company's reasonable attorney's fees, costs of labor applied to this contract, overhead, costs of any materials applied to or ordered for this contract, and any charges imposed upon Company by its suppliers or subcontractors.
- 10. **SURCHARGES.** In the event of an Original Equipment Manufacturer (OEM) price increase, Carolina Cat reserves the right to revise pricing or apply a Surcharge in direct correlation to the price increase received from the OEM.

CATERPILLAR CAROLINA CAT

- 11. <u>COSTS</u>. Customer shall pay all of Company's costs and expenses, including reasonable attorney's fees, of collecting any amount not paid when due hereunder and of otherwise enforcing the terms and conditions of this contract.
- 12. EXCUSE FOR NON-PERFORMANCE. Company shall not be liable for damages of any kind, caused by delays in shipment, delivery, or any other nonperformance of this contract, directly or indirectly resulting from or contributed to by any circumstances beyond Company's control, including without limitation, riots, wars, earthquakes or national emergencies, labor disputes of every kind however caused, embargoes, nondelivery by suppliers, inability to obtain supplies through normal sources of supplies, delays of carriers or postal authorities, or governmental restrictions, prohibitions or diversions. The occurrence of any such circumstance shall operate to extend Company's time of performance hereunder for a period not less than the period of such delay. In the event of any such circumstance, Company may allocate its production and deliveries among its customers as it may decide in its sole discretion.
- 13. **INSOLVENCY OF CUSTOMER.** Company may cancel this contract and suspend any further deliveries hereunder without any liability to Customer, and, if the Equipment has been delivered but not paid for, the price therefor shall become immediately due and payable despite any other agreement to the contrary, if: (i) any proceedings in bankruptcy, insolvency, receivership or liquidation are taken against Customer; (ii) Customer makes an assignment for the benefit of creditors or commits an act of bankruptcy or insolvency; (iii) Customer ceases, or threatens to cease, to carry on the ordinary course of its business, or transfers all or substantially all of its property; (iv) the Equipment is seized under any legal process or confiscated; or (v) Company in good faith believes that the ability of Customer to pay or perform any provision of this contract is impaired, or that the Equipment is in danger of being lost, or that any of the events mentioned above is about to occur.
- 14. <u>LIMITATION ON DAMAGES</u>. Company shall not be liable in tort, including liability in negligence or strict liability, and shall have no liability at all for injury to persons or property with respect to the Equipment or Company's performance hereunder. Company's contractual liability for failure to fulfill its obligations hereunder or any other liability in connection with the Equipment shall be limited to the amount of the purchase price of the Equipment. Even if Company has been advised of the possibility of the following, Company shall not be liable for any indirect, incidental, special or consequential damages, including lost profits and revenues, losses due to delay in shipment, failure to realize expected savings, any claim against customer by a third party, or any other commercial or economic losses of any kind.
- 15. **NOTICES.** All requests, instructions and notices from one party to the other must be in writing and may be given via mail or facsimile transmission to the address of the parties shown on the face of the Sales Order Agreement.
- 16. **GOVERNING LAW; VENUE.** This contract shall be governed by the laws of the state of North Carolina, without reference to its conflict of laws provisions. All disputes arising out of or in connection with this Agreement shall be brought and maintained in a state or federal court of competent jurisdiction located in Mecklenburg County, North Carolina.
- 17. MISCELLANEOUS. The terms and conditions stated herein constitute the complete and exclusive statement of the terms and conditions of the sale of the Equipment. There are no other promises, conditions, understandings, representations or warranties of any kind with respect to the subject matter hereof. This contract may be modified only by a writing referencing this contract signed by Company and Customer. The parties acknowledge and agree that any and all additional or different terms and conditions contained in any of Customer's acceptances, acknowledgments, invoices, bills or other commercial documents are hereby rejected by Company and shall not become part of the Conditions of Sale or limit, modify or otherwise affect the Sales Order Agreement. The failure of Company to enforce any right hereunder will not be construed as a waiver of its right to performance in the future. Any provision of this contract which is, or is deemed to be, unenforceable in any jurisdiction shall be severable from this contract in that jurisdiction without in any way invalidating the remaining provisions of this contract, and that unenforceability shall not make that provision unenforceable in any other jurisdiction. The rights which accrue to Company by virtue of this contract shall inure to the benefit of its successors and assigns.

SUBMITTED BY: Darin Wilson	CAROLINA CAT
ACCEPTED BY:	P.O. #:
COMPANY:	DATE:

CATERPILLAR CAROLINA CAT



Russelectric, A Siemens Business South Shore Park Hingham, MA 02043 800 225-5250 Russelectric.com

PROPOSAL NOTES

The proposed transfer switch product is UL 1008A listed based upon standard Russelectric design and components utilizing the RPTCS-05 controller, in a momentary closed (make before break) mode of operation and provided with standard accessories.

Our Bill of Material includes a set of drawout breaker maintenance tools and a set of recommended spare parts, including AC fuses, LEDs, etc

Russelectric utilizes WAGO cage clamp terminals for all control terminals in control circuits lieu of binding screw terminals and control wire ring tongue lugs. All wire terminations made at meters, relays, CTs and PTs and other similar devices shall be made with ring-tongue or locking-spade crimp lugs or as required by the device termination point.

Our Bill of Material includes complete coordination of the engine generator system with the ATS and components in the form of a composite wiring diagram which shows all engine controls, generator controls, and ATS controls.

Our Bill of Material is based on our furnishing our standard ILSCO copper/aluminum compression lugs for all power cable connections.

After installation by others, Russelectric Inc. will furnish a competent service engineer for two (2) days (estimated) to assist in placing the MV Transfer Switch in operation and instruct personnel in its proper use.

Field service support is based on the normal work week. Overtime hours for weekends, holidays, etc., all require an adder based on standard published field service rates.

Our Bill of Material does not include any load banks, cables, fuel and/or any specialized test equipment at the site it is our understanding that this would be the responsibility of others.

SIEMENS

Submittal drawings for the above equipment can be prepared in 10 weeks after receipt of order and all necessary engineering information. Shipment can be currently rendered 61-67 weeks after approval of drawings. Actual shipment will be dependent on receipt of all engineering information and available production capacity, at the time of order release.

Quote Notes:

- 1. Quotation is based upon furnishing a 5 kV UL 1008A Medium Voltage Automatic Circuit Breaker Transfer Switch lineup, contained in a NEMA 3R, non-walk-in enclosure as described below utilizing current standard Russelectric medium voltage switchgear design and components to meet the construction and operational requirements of the project Specifications Section 26 36 00, as a listed approved manufacturer. At the time of this quotation there was no project one line diagram supplied. The ATS' will operate in a momentary closed transition (i.e. make before break) mode of operation.
- 2. Refer to the enclosed Proposal Comments & Notes document for additional information.
- 3. Please note that the Russelectric MV ATS product when contained within a N3R non-walk-in enclosure is not seismically certified. The requirement for seismic certification for this switchgear configuration was not indicated in the project specifications Section 26 36 00.
- 4. Estimated Dimensions: 72" W x 99.25" D x 100.25" H each switch (NEMA 1 dimensions)
 NEMA 3R enclosure dimensions TBD

Line #: Qty Description

21000 1 5 KV MV ATS--MV Switchgear - 2 Sections

4160 V, 3Ø3W, 60 HZ, Service Entrance: Same Enclosure, Breaker Manufacturer: Siemens, 40,000 A, Lug Type: Ilsco Compression, Bus Material/Plating: Copper / Tin Plated, Main Bus Amperage: 1,200 A, Terminal Block Type: WAGO (Standard).

- 1 SECTION-1
- 1 DISTRIBUTION
 - 1 MV Metal Clad Distribution Cubicle
 - 1 NEMA 3R Enclosure
 - Portable MV Circuit Breaker Lift Device
- 1 GMSG BREAKER-52-U (A)
 - 1 GMSG 1200A 5KV 40kA Siemens Breaker
- Miscellaneous Items
 - 2 MISCELLANEOUS Low Voltage CT (set)
 - 1 Synchronizing Check Relay
 - 3 Annunciator Pilot Light
 - CB Control Switch w/ lights

SIEMENS

Proposal

- 1 Protective Relays
 - 1 Siemens 7SJ82 Feeder-Protective Relay
- 1 CUSTOM-SERV ENT
 - 1 SERV ENT
- 1 GMSG BREAKER-52-E (B)
 - 1 GMSG 1200A 5KV 40kA Siemens Breaker
- 1 Miscellaneous Items
 - 2 MISCELLANEOUS Low Voltage CT (set)
 - 1 Synchronizing Check Relay
 - 3 Annunciator Pilot Light
 - 1 CB Control Switch w/ lights
- 1 Protective Relays
 - 1 Siemens 7SJ82 Feeder-Protective Relay
- 1 SECTION-2
- 1 TRANSITION
 - 1 MV Metal Clad Transition Cubicle
 - 1 NEMA 3R Enclosure
- 1 Auxiliary Compartment (A)
- 1 CUSTOM-LOAD TAKEOFF BUS & TERMINATION
 - 1 LOAD TAKEOFF BUS & TERMINATION
- 1 CUSTOM-RPTCS CTLLR CT
 - 1 RPTCS CTLLR CT
- 1 Miscellaneous Items
 - 2 MISCELLANEOUS Medium Voltage VT (set)
 - 4 Aux. Contact Panel
 - 1 Serial to Fiber Converter
 - 2 Draw-out VT Carriage
- 1 CUSTOM-05 ADD'ACCY
 - 1 05 ADD'ACCY
- 1 SPARE PARTS
 - 1 Spare Parts PER SPEC PAGE 8

22000 2 ATS1, ATS2

RTS03-ATB2603BMF3R-RPTCS05

RTS-03 Cycle, Automatic, Transfer Switch, Delayed Transition – Dual Motor RPTCS, 260 A, 3 Poles, 480 V, 3Ø 3W, 65,000 A WCR.

- 1 SECTION-ATS
 - 1 Additional I/O Card
 - 1 Enclosed Switch
 - 1 NEMA 3R Freestanding Enclosure
 - 260 A Switch Size 65,000 A Withstand Rating Build As 600 A
 - Padlock Provisions
 - 1 Enclosure Paint (Exterior) ANSI 61 Gray
- 1 SELECTORS
 - 1 XC1 Remote Load Test Switch
 - 1 XL1 Test / Auto Load Test Lever Switch
 - XF4 Maintain Source 2 Programmable Function
- 1 LIGHTS
 - 1 LT1 Source 1 Position Light (Internal)
 - 1 LT2 Source 2 Position Light (Internal)
 - 1 LT3 Source 1 Available Light (Internal)
 - 1 LT4 Source 2 Available Light (Internal)
 - 1 LT20 Transfer Inhibit Light (Internal)
 - 1 LT21 System in Alarm Light (Internal)

SIEMENS

Proposal

1 - TIMERS AND RELAY

- TDES Time Delay Override Momentary Power Outage Delay Engine Start (0:0-259:59 min:sec)
- 1 TDEC Time Delay Engine Cooldown (Internal 0-3600s)
- TDPS Time Delay Retransfer to Preferred Source
- 1 TDNPS Time Delay Transfer to Nonpreferred Source
- 1 TDNP Time Delay Neutral to Preferred Source
- 1 TDNNP Time Delay Neutral to Nonpreferred Source
- 1 BTR Block Transfer Relay w/ Programmable Override
- 1 LTR Load Test Relay
- 1 LSR Load Shed Function

1 - METER

- 1 PM Power Monitor
- 1 SB Shorting Terminal Block for Current Transformers
- 1 Ethernet Port

1 - CONTACTS

- 2 CS1A Source 1 Available Form C Auxiliary Contact
- 2 CS1P Source 1 Position NC Auxiliary Contact
- 2 CS2A Source 2 Available Form C Auxiliary Contact
- 2 CS2P Source 2 Position NC Auxiliary Contact
- 2 CES Form C Contact to Initiate Engine Start

1 - MISCELLANEOUS

- 1 ELEV2 Elevator Pre-Signal Contacts, Time Delay Before Transfer
- 1 Additional Form C Contacts
- 1 EXF Exerciser Function (Programmable)
- 1 THS-STH Thermostat and Space Heater Assembly