

PARTS & SERVICE 1-888-434-7378 www.ge.com

<b>BUYERS INFORMATION:</b>
DOTENS HAT ONFINITION,

Quote Requested by	John Alligood
Company	City of Round Rock
Address	Round Rock, TX
Phone	512-801-4446
Email	jalligood@roundrocktexas.gov
Service Contact	Justin Cummings
Phone	337-354-9436
BUYER PO NO.	
DUNS#	

NOTICE: This quotation is void unless accepted within 30 days from date hereof and is subject to change upon notice. However, if GE elects to perform the services covered by the quotation, in response to an order placed 30 or more days after the date of the quotation, the terms of the quotation will apply.

QUOTATION NO.	DA062017-ROUNDRROCK-PB2 R2
DATE	October 4, 2017

# SUBMIT PURCHASE ORDER TO: GENERAL ELECTRIC INTERNATIONAL INC. (GE):

GE Contact	Lil Higgins
Address	GE International Inc.
	3100 Technology Drive Ste. 200
	Plano, TX. 75074
Phone	469 808 0754
	972 767 4291
Email	Energy.Gulf_ind_Orders@ge.com

# REMIT PAYMENT TO: GENERAL ELECTRIC INTERNATIONAL INC. PO Box 281997 Atlanta, GA 30384

### **Work Services Description**

GE Industrial Solutions (GEIS) is pleased to offer this firm price proposal for the replacement of three (3) obsolete 2000AF/1600AT 480V PowerBreak Breakers with new 2000AF/1600AT PowerBreak 2 Breakers, and the replacement of three (3) obsolete 1600AF/1600AT PowerBreak Breakers with new 1600AF/a600AT PowerBreak 2 Breakers at the City of Round Rock Water Treatment Facility in Round Rock, TX The workscope will be executed at a time that is mutually agreeable to both the Customer and GEIS. For estimating purposes, GEIS has assumed and outage will be scheduled after-hours, Monday-Thursday. GEIS is also giving the Customer the option of changing out one (1) breaker per outage (6 outages and mobilizations), or of changing out three (3) breakers per outage (2 outages and mobilizations)

#### **Equipment and Material Included:**

GEIS will provide the following material as part of this workscope:

- Three (3) 480V 2000 Amp Frame with 1600 Amp Trip GE PowerBreak 2 Breakers, each with
  - o New Trim Plate
  - o Kirk Lock Provision
  - o Bolt-in Construction
- Three (3) 480V 1600 Amp Frame with 1600 Amp Trip GE Powerbreak 2 Breaker, each with
  - o New Trim Plate
  - o Kirk Lock Provision
  - o Bolt-in Construction

#### Workscope:

GEIS will provide the manpower and material listed above to replace the existing Main-Tie-Main (M-T-M) Powerbreak breakers with new Powerbreak 2 breakers in two (2) switchboard line-ups at the City of Round Rock Water Treatment Facility. The existing M-T-M kirk interlock scheme will be replicated and confirmed.

The new PowerBreak 2 breakers will be commissioned as follows

### LOW VOLTAGE FIX MOUNTED, INSULATED CASE, CIRCUIT BREAKERS

- The circuit breaker will be manually operated and inspected for proper open and close operation.
- The primary contact resistance of each phase will be measured with a ductor and recorded.
- Using a megohmeter measure phase-to-phase and phase-to-ground insulation resistance.
- The circuit breakers equipped with solid state or microprocessor programmers (LSI) will be tested with via secondary current injection. The existing trip unit settings will be duplicated within the new Entelliguard Trip Units.
- The kirk lock M-T-M scheme will be verified to match the existing

Upon completion of the installation and commissioning, GEIS will provide one (1) electronic copy of an Engineering Appraisal Report to include the following:

- Workscope
- Equipment
- Test Procedures and Data Sheets
- Conclusions and Recommendations

#### Price, Terms and Conditions

GE will provide the moterial and services, as described above, for the following firm price:	
One Hundred Eighty-Six Thousand Dollars	\$ 186,000.00 (USD)
Breakout Pricing as follows:	
Three (3) 2000AF Breakers	\$ 67,160.00 (LOT)
Three (3) 1600A Breakers	\$ 64,375,00 (LOT)
Installation and Commissioning (6 Breakers)	\$ 54,465.00 (LOT)

Note: Breakouts for accounting purposes only. Price above is contingent on complete package purchase

- Price is valid for work completed by March, 2018
- Invoice(s) to be issued upon receipt of equipment and completion of workscope
- Payment Terms: Net 30 days from the date of invoice.
- Pricing does not include any applicable taxes, permits and licensing fees.

The sale of any service and products, and the integration thereof, ordered by the Buyer is expressly conditioned upon the terms and conditions contained in this quotation and Terms and Conditions for Sale of Products and Services Form ES 104 (Rev 4) ("Terms and Conditions") as attached hereto. Any additional or different terms and conditions proposed by the Buyer at any time are expressly objected to and will not be binding upon GE unless specifically agreed to in writing by GE's authorized representative. Any order for, or any statement of intent to purchase hereunder, or any direction to perform work and GE's performance of work shall constitute assent to the Terms and Conditions. Oral agreements and/or commitments to perform services are not enforceable.

#### **Additional Services**

Should the Buyer desire to have GE perform additional services beyond the scope of services described in this proposal, a change order request will be submitted for the additional associated costs. No additional services shall proceed without written authorization from the Buyer. Additional services will be performed per our published rates for Service, applicable at the time that worked is performed, including work that extends through the weekend / holiday. The current rates for Service can be found in Attachment "A".

#### **Buyer's Responsibilities**

The Buyer's responsibilities shall include, but are not limited to, the following:

- Issue switching orders, schedule outages, and de-energize the electrical apparatus, including Lock-Out Tag-Out (LOTO) of all systems associated with GE's work scope involved in the project. LOTO procedures shall meet or exceed Contractor or GE's requirements, whichever are more stringent.
- Prior to the start of the on-site work, Buyer shall familiarize GE personnel with their safety practices, regulations in
  effect at jobsite, and any chemical and physical hazards, including process safety issues associated with the work
  environment. GE shall be under no obligation to commence work unless safety practices are acceptable to GE. As a
  safety precaution, prior to the commencement of work, access to a nearby telephone with the ability to call outside
  the facility will be provided by Buyer, as well as telephone numbers for local emergency services.
- Buyer will dispose of all wastes generated at the work site. Buyer will be responsible for environmental conditions and will keep the equipment free of contaminants that would be detrimental to the performance of the equipment.
- Buyer shall be responsible for the removal and replacement of any obstructions that may interfere with access to or removal of the existing equipment
- Buyer will provide an experienced electrician or electrical supervisor familiar with the power distribution system and trained in electrical safety and emergency response procedures including CPR, AED, and first aid for purposes of:
  - Directing GE personnel in identifying and isolating the proper electrical equipment.
  - Shutting down electrical equipment in an emergency and providing emergency response during high risk
    operations including electrical work when a single GE representative is dispatched. This person must be
    visually present during all electrical work and high risk operations. If not present then GE will stop work and
    notify the Buyer.
  - Complying with OSHA 1910.269(I)(1) and 1910.269(b)
- Buyer will provide all "special" maintenance tools including; closing handles, test couplers, closing jacks, lifting
  devices, breaker cars/lift trucks, etc., furnished or defined by the original equipment manufacturer(s).
- Buyer shall provide one (1) copy of existing system schematics, drawings and other information regarding the
  equipment/site that is needed, and be responsible for the accuracy of same and verbal information concerning
  existing conditions and wiring.

- All communication between, including meetings, all documents, notes on drawings, and submissions required under contract, shall be in the English language. Any language translation, of required, will be the responsibility of the Buyer.
- Buyer must supply minimum power supply of 120V, 1-Phase, power source, if necessary.
- Buyer will provide/operate/maintain services for drinking water, sanitary facilities, parking, trash containers, and lighting.
- Buyer to provide croft labor with tools and equipment to assist field engineer working on site, if necessory.
- Buyer to supply, operate, and maintain all standard services to the site facility, such as electric power, lighting, water, air, etc., if required. Backup for these systems is not included in this proposal. These services are to be made available to GE, including a suitable source of 60Hz 120/240 volts AC, unless otherwise provided herein.
- Buyer to provide, and be responsible for, applicable codes, standard, laws, regulatory requirements, etc. required for the development of functional specification and system design and operation.
- Buyer shall be responsible for the review of the installation to assure compliance with applicable codes. It is the
  intention of GE to comply with the applicable codes, standards, lows, regulatory requirements, etc.; however, by low it
  is the responsibility of the Buyer for compliance of the total installation. GE would be pleased to quote any additional
  features or equipment that the Buyer deems necessary to meet these requirements.

#### **Assumptions and Clarifications**

- On-site work will be performed at a time that is mutually agreeable to both the Customer and GEIS, Monday-Friday, 08:00-17:00, excluding Holidays and Weekends
- Any items or services not specifically outlined herein are not included.
- Circuit breakers equipped with thermal or thermal-magnetic trips (Molded Case Breakers) will not be tested via primary current injection
- Relay and trip unit settings will be provided by others in an electronic software format.
- Data Mapping, set-points and communication with new or existing equipment is not included within this scope.
- GE assumes and is relying on the fact that any information furnished by Buyer is accurate and complete. To the extent that GE obtains actual knowledge of any conditions with the equipment and/or the conditions at site are in addition to and/or different from those indicated in the Buyer's furnished documentation / information and/or there is a previously unknown physical condition that is found with the equipment and/or at the site, GE shall notify the Buyer. If such condition(s) exist and this causes an increase in GE's cost of and/or the time required for the performance of any part of the work under a contract, an equitable adjustment may be made, including without limitation, to the price and/or schedule.
- With the exception of delays beyond the control of GE, no additional work scope shall proceed without the written authorization of the Buyer.
- Should any unforeseen work delays beyond the control of GE accur, including those as a result of malfunctions or
  deficiencies encountered with the equipment (unless caused by GE) or should the Buyer desire to have GE perform
  work beyond the scope of work described in this proposal, that work will be billed at the published rates in effect at
  the time of performance of that the work scope and will apply to all GE project management, field engineers, field
  engineering service technicians and/or craftsmen.
- GE expressly objects to any requirements, methods or conditions contained in any Buyer request that are not specifically addressed in this document, and such requirements, methods and conditions, if any, are autside the scape of this proposal.
- Schedule: Unless otherwise stated in the scope, all work will be performed on a straight time basis. All work is to be
  performed on a mutually agreeable schedule. The foregoing work as described under work scope shall be performed
  during normal working hours Monday through Friday, Holidays excepted. If work is performed on an overtime basis,
  the premium for the time spent and other applicable cost will be billed in addition to the price quoted and will be
  billed at our published rates in effect at the time work is performed. Time and expense of GE employees' travel from
  their headquarters to work site and return, shall be considered as time worked. GE requires a minimum two (2) weeks
  advance notice to ensure availability of resources.
- The services shall be considered "Substantially Complete" when the services to be performed by GE or the designated partion thereof, are sufficiently complete in accordance with the contract documents, so that the Buyer can occupy or use the services or portion thereof for its/their intended use. For products only order, "substantially complete" shall mean the date of shipment of the products. A "Punchlist" is to be developed upon "Substantial Completion," and GE's standard warranty shall provide coverage (when applicable) for issues that occur after "Substantial Completion. "Final Project Completion" shall be reached when all contractual responsibilities have been met and the final bill issued.

#### GENERAL ELECTRIC INTERNATIONAL, INC.

Ву:	Roger Andrews		
Title:	Senior Sales Manage	er	
Email;	roger.andrews@ge.c	com	
Phone:	2281-740-2145	Fax:	

#### BUYER:

Company:	
Ву:	(Signature)
Title:	
Email	Date:

This proposal and specification are submitted in confidence solely for use in consideration of the merits of the offering and for no other direct or indirect use by Buyer and its contents are proprietary to GE. In taking receipt of this document, Buyer agrees not to reveal its contents except to those in its own organization who must evaluate it, to use this document and the information that it contains exclusively for the above-stated purpose and to avoid disclosure of the information to competitor of GE.

## Commercial Rates for Industrial Services

Effective: March, 2017

### 8-Hour Daily Rates U.S. Dollar

Service Description	Westday	Saturday	Sunday
Held Services			Holiday
Field Engineer	\$2,090	\$3,01A	\$190
Specialized Reid Enginer	\$2,552	\$3,707	\$4,85
Consulting Engineer	\$3,675	\$5,397	\$7,114

#### Service Center

Service Center Specialist	\$2,090	\$3,01A	\$3,938
Service fech Work Leader	\$1,733	\$2,A73	\$3.218
Service Technicum	\$1,654	\$2,363	\$3,066

Phone Support \$1,300/0000

#### **Tooling Rates**

TR Comerci	\$75/day, \$100/week
Wbrahan Test Set	\$125/day, \$500/week
Cirime Hotor Test Set	\$250/day, \$1,000/week
Offine Hotor Test Sat	\$250/day, \$1,000/week
Primary Current Injection Set	\$350/day \$1,400/week
Refov Test Set	\$300/day \$2,000/weds
Power Factor Test Set	\$500/day, \$2,000/week
Vocasm Of Processor	\$2,500/day

#### Field Engineer

Service is technical advice and counsel from feld personnel based on sound engineering manufacturing installation and operation practices as applicable to the equipment. Such services may include analysis, adjustment, programming and other similar services. They do not include supervision or management of purchaser's employees, agents or other contractors and do not include design effort.

#### Specialized Field Engineer

these services include instal lation, commissioning, repair, service, markenance and approde work associated with

- Medium voltage maters, & generators
- Paralleing Switchges
- Synchronous maters & generators, including evaluation
- Medium voltage drives
- Legacy drive products, including DC/AC2000 OCIDVIACSOO, Innevation, Sitron & Volutral
- Legacy control systems including. Senes 5 & Senes 6
- Specially power system studies, including. Harmonic, Transient Switching & Grounding
- Suppoord and affishers work with a measure 14 hour i day billing. Restams work requires a pay differential.

#### Consulting Engineer

Consular gangineers provide savices requiring a high level of angineering or technical expertise and hypically include ss and diagnose of a problem A consulting engineer has speadard bodymend experence, and training in application, design, analysis, systems and automation

#### Service Center

Service Central Specialist: Provides overall coordination and technical leadership on-site and in shap of service craftsmen and Work Leaders

Service Center Work Leader Provides on-site and in shap hands on leadership of GE anotherien on a per shift basis.

Service Technicians Craftsmen experienced in the inspects test, installation, service, and repair of one or more of the following equipment types:

- transformer (Mechanical, Electrical, Fluid & LTC)
- . Hotors, Drives & Controls Edurament
- Switchgoor
- Mechanical
- Hydro (Electrical, Mechanical & Controls)



GE Energy Connection's field service engineers and consulting experts are on call to provide a wide range of service and repairs on both GE and non-GE equipment and engineered systems in Industrial and Balance-Of-Plant Power Plant Systems.

For more information contact your local GE office or call our 24x7 customer service center at \$48-434-7578 or 540 187-8617 or visit us at a contact of the c

#### Typical Installations, Services, Repairs, and Products:

- Transformer finducing Hechanical, Electrical, Fluid & LTD
- Power Delvary Equipment
- Motors, Drives and Controls Equipment
- Distributed Control Systems and Programmable Logic Controls
- Instrumentation Related to Process Control and Automation Systems
- Morine Electrical Systems
- Power System Studies

#### Rate Terms

1	Work greater than 8 hours per day is billed per hour	Overtime	Couble Troe
	Fe'd Engineer	\$346.00	\$46200
	Constational Classification	841100	467700

\$433.00	\$577.00
\$644.00	\$858.00
\$346.00	\$462.00
\$278,00	\$371.00
\$264.00	\$352.00
	\$644.00 \$146.00 \$278.00

For less than 24 hour response, a 1.15 multiplier is used for daily, overtime and double time rates.

Overtime applies to billable weekday hours 9-12. Double time applies to: Billable weekday hours greater

- than 12, Saturday hours greater than 8, Sundays and holdays.

  Preparation, travel, and report writing time will be charged at the applicable rate (i.e., do ly rates, overtime and double time) on a round trip basis with point of deporture based on the location of the GE Representative's office/service center
- Addressed travel and two powerses include.

Overnight stay	\$160 per day
Air Travel / Rental Car charges	Cost + 20%

Notes: Additional titl charges may apply for high cost of ining areas

- fravel and fiving expenses outside the commental USA, will be billed at a cost plus 20% minimum, or consult with your boal GE representative for a local per deminate
- Materials, author tract tobor and equipment required to support GE will be provided at cost + 35%.
  All equipment is 1 OB shipping point, seller's dock, with freet's prepaid and charged 3% of material price to minimum, per shipment charge of \$100,000 shall apply! Seller reserves the right to select the method of transportation provided for all products unless specified by the afters not less than 12 hours provide shipment. Any premium transportation or required special handling is in addition and shall be for the
- Consult with local GE office to determine applicable changes for other special tooling and/or test equipment or any taxes, fees or VAT that may be in addition to the above rates. Minimum daily billing of B hours for all services provided including standby time. A minimum order of \$500,00 shall apply for a
- parts/material only order

  All rates are for hours worked, traveled, or an standity and are based on GE's standard terms and
  conditions of safe (Form ES 104 Rev 4). Price and data subject to change without notice. This quatation is not volid for PCB services, off share or confined 'combans
- Fhone Support is a service provided on the prione by a Field Engineer for limited hardware and safeware troubleshooting services.

Employee screening costs as required by the customer will be provided as follows:

Custom drug screen or background check TWIC Cord \$250 RDISET a HUET Notes: All trovel time to complete the screenings will be talled at the copilizable hou \$1500

1 above plus expenses. All other specialty training will be billed at cost > 20%.

11 All time to complete site specific training will be billed at the applicable hourly rate as set forth in 1 above

\*\* The Standard and Applicable rates shown on this sheet assume that services are being performed at a location that is not subject to a Location Premium which is an additional chargefrate that may be assessed for remails, inconvenient, confirmed or affishere work sites. Please contact GE to see if a Location Premium applies to your

#### Terms and Conditions for Sale of Products and Services

#### Form ES 104 (Rev. 4)

NOTICE Sale of any Products or Services as expressly condustated on Buyer's assent to these Terms and Conditions Any acceptance of Seller's offer is expressly limited to acceptance of these Terms and Conditions and Seller expressly objects to any additional or different terms proposed by Buver. No facility expr form shall modify these Terms and Conditions even if signed by Seller's representative. Any order to perform work and Seller's performance of work shall constitute Buyer's assent to these Terms and Conditions. Unless otherwise specified in the quotation, Seller's quutation shall expire 30 days from its date and may be modified or withdrawn by Seller before receipt of Buyer's conforming acceptance.

1. Definitions
"Buyer" means the entity to which Seller is providing Products or Services under the Contract
"Contract" means either the contract agreement signed by both partles, or the purchase order signed by
Buyer and accepted by Seller in writing, for the sale of Products or Services, together with these Terms and
Conditions, Seller's final quotation, the agreed sceptely of work, and Soller's order acknowledgement. In the
event of any conflict, the Terms and Conditions shall take precedence over other documents included in the

"Contract Price" means the agreed price stated in the Contract for the sale of Products and Services,

including adjustments (flamy) in accordance with the Contract
"Hazardous Materials" interns any torus or hazardous substance hazardous material, dangerous or
hazardous waste, dangerous good, radioactive material, petroleum or petroleum-derived products or byproducts, or any other chemical, substance, material or emission, that is regulated, listed or controlled pursuant

products, or any other chemical, substance, material or emission, that is regulated, tipted or controlled pursual to any national, state, pro vincial, or local allow, statue, ordinance, directive, regulation or other legal requirement of the United States ("U.S.") or the country of the Site
"Insolvent/Bankrupt" means that a party is insolvent, makes an assignment for the benefit of its creditors, has a receiver or trustee appointed for it or any of its assets, or files or has filed against it a proceeding under any bankruptey, insolvency dissolution or liquidation laws,
"Products" means the equipment, parts, materials, supplies, software, and other goods Seller has agreed

to supply to Buyer under the Contract
"Seller" means the entity provide

to supply to Buyer under the Contract

"Seller" means the mility providing Products or performing Services under the Contract,

"Services" means the services Seller has ogreed to perform for Buyer under the Contract

"Stite" means the premises where Products are used or Services are parformed, not including Seller's

premises from which it performs Services

"Terms and Conditions" means these "Terms and Conditions for Sale of Products and Services",
including any relevant addenda pursuant to Article 18, together with any modifications or additional provisions
specifically stated in Seller's final quotation or specifically agreed upon by Seller in writing

#### Payment

- 2. Payment

  2. Payment

  2. Buyer shall pay Seller for the Products and Services by paying all invoiced amounts in U.S. dollars, without set-off for any payment from Seller not due under this Contract, within thirty (20) days from the invoice date. If the Contract Price is less than U.S. Two Hundred Fifty Thousand Dollars (\$250,000), Seller shall issue invoices upon shipment of Products and as Services are performed. If the Contract Price is U.S. Two Hundred Fifty Thousand Dollars (\$250,000) or more, progress payments shall be invoiced starting with twenty-five percent (\$25\starting{1}\) of the Contract Price for Products and Services upon the earlier of Contract signature or Issuand Services upon the earlier of Contract signature or Issuand Services upon the earlier of Contract signature or Issuand Services upon the earlier of Contract signature or Issuand Services upon the earlier of Contract signature or Issuand Services upon the earlier of Contract Price for Product is received before the earliers scheduled Product shipment and Services are invoiced as performed (Progress Payments). For each calendar month, or fraction thereof, that payment is late, Buyer shall pay a late payment charge computed at the rate of 1.5\starting{5}\) per month on the overdue balance, or the maximum rate permitted by law, whichever is less

  2.2 Ag and if requested by Seller, Buyer shall at its expense establish and keep in force payment
- permitted by law, whichever is less

  2.2 As and if requested by Seller, Buyer shall at its expense establish and keep in force payment security in the form of an intervocable, unconditional, sight letter of credit or bank guarantee allowing for practata payments as Products are shipped and Services are performed, plus payment of cancellation and termination charges, and all oliner amounts due from Buyer under the Contract ("Payment Security"). The Payment Security shall be (a) In a form, and issued or confirmed by a bank acceptable to Seller, (b) payable at the counters of such acceptable bank or negotiating bank, (c) upened at least sixty (60) days prior to both the earliest scheduled shipment of Products and commencement of Services, and (d) remain in effect until the later of iniety (90) days after the last scheduled Product shupment, completion of oil Services and Seller's receipt of the final payment required under the Contract. Buyer shall, at its expense, increase the amount(s), extend the validity period(s) and make other appropriate modifications to any Payment Security within ten (10) days of Seller's notification that such adustinent is necessary in connection with Buyer's obligation under the Seller's notification that such adjustment is necessary in connection with Buyer's obligations under the
- 2.3. Seller is not required to commence or continue its performance unless and urall any required Payment Security is received, operative and in effect and all applicable Progress Payments have been received. For each day of delay in receiving Progress Payments or acceptable Payment Security, Seller shall be entitled to a matching extension of the schedule. If at any time Seller reasonably determines that Buyer's financial condition or payment history does not justify continuation of Seller's performance, Seller shall be entitled to require full or partial payment in advance or otherwise restricture payments, request additional forms of Payment Security, suspend its performance or terminate the Contract

Seller shall be responsible for all corporate taxes measured by net income due to performance of or Seller shall be responsible for all corporate taxes measured by net income due to performance of or apyment for work under this Contract ("Seller Taxes") Buyer shall be responsible for all taxes, dutter, fees, or other charges of any nature (including, but not limited to, consumption, gross receipts, import, property, sales, stamp, turnover, use, or value-added taxes, and all items of withholding, deficiency, penalty, addition to tax, interest, or assessment related thereto, imposed by any governmental authority on Buyer or Seller or its subcontractors) in relation to the Contract or the performance of or payment for work under the Contract other than Seller Taxes ("Buyer Taxes"). The Contract Price does not include the amount of any Buyer Taxes (Buyer shall pay additional amounts so that Seller receive the full Contract Price without reduction for Buyer Taxes. Buyer shall provide to Seller, within one month of payment, official receipts from the applicable governmental authority for deducted or withheld taxes.

#### Deliveries; Title Transfer; Risk of Loss; Storage

- 4. Delliveries; Tille Transfer; Risk of Loss; Storage
  4.1 For shipments that do not involve export, including shipments from one European Union ("EU")
  country to another EU country, Seller shall deliver Products to Buyer FCA Soller's facility or warehouse
  (Incoterms 2010) Buyer shall pay all deliver costs and charges or pay Seller's standard shipping charges plus up to
  twestly-five (25%) percent. Partial deliveries are permitted. Seller may deliver Products in advance of the
  delivery schedule. Delivery times are approximate and are dependent upon prompt receipt by Seller of all
  information necessary to proceed with the work without interruption. If Products delivered do not correspond
  in quantity, type or price to those themseed in the shipping invoice or documentation, Buyer shall so notifly
  Seller within ten (10) days after receive.
- in quantity, type or price to incess utermized in the shipping invoice of occumentation, buyer shall so nonly Seller within ten [10] days after receipt.

  4.2 For shipments that do not involve export, title to Products shall pass to Buyer upon delivery in accordance with Section 4 | For export shipments from a Seller facility or warehouse outside the U.S., title shall pass to Buyer upon delivery in accordance with Section 4.1. For shipments from the U.S. to another country, title shall pass to Buyer immediately after each item.

departs from the territorial land, seas and overlying airspace of the U.S. The 1982 United Nations Convention of the law of the Sea shall apply to determine the U.S. territorial seas. For all other shipments, title to Products shall pass to Buyer the earlier of (1) the port of export immediately after Products have been cleared for export or (iii) immediately after products have been cleared for export or (iii) immediately after each item departs from the territorial land, seas and overlying airspace of the sending country. When Buyer arranges the export or intercommunity shipment, Buyer will provide Soller of Quote Number. DA062017-ROUNDRROCK-PB2 R2

GE Confidential and F exportation or intercommunity shipment acceptable to the relevant tax and custom authorities. Notwithstanding the foregoing, Seller grants only a license, and does not pass title, for any software provided by Seller under this Contract, and title to any leased equipment remains with Seller.

4.3 Risk of loss shall pass to Buyer upon delivery pursuant to Section 4.1, except that for export shipments from the U.S., risk of loss shall transfer to Buyer upon title passage.

4.4 If any Products to be delivered under this Contract or if any Buyer equipment repaired at Seller's

- 4.4 If any Products to be delivered under this Contract or if any Buyer equipment repaired at Sellier's facilisties cannot be shipped to or received by Buyer when ready due to any cause attributable to Buyer or its other contractors, Sellier may ship the Products and equipment to a storage facility, including storage at the place of manufacture or repair, or to an agreed freight forwarder. If Sellier places Products or equipment into storage, the following apply: (it title have and sits of loss immediately pass to Buyer, if they have on already passed, and delivery shall be deemed to have occurred. (ii) any amounts otherwise payable to Sellier upon delivery or shipment thall be due, (iii) all expenses and charges incurred by Sellier related to the storage shall be apable by Buyer upon submission of Sellier's invoices, and (iv) when conditions permit and upon payment of all amounts due, Sellier shall make Products and repaired equipment available to Buyer for delivery.

  4.5 If regair Services are to be performed on Buyer's equipment at Sellier's facility, Buyer shall be responsible for and shall retain risk of loss of, such equipment at all times, except that Sellier shall be responsible for damage to the equipment while at Sellier's facility, to the extent such damage is caused by Sellier's negligence.
- Seller's negligence

Warranty

1 Seller warrants that Products shall be delivered free from defects in material, workmanship and title and that Services shall be performed in a competent, diligent manner in accordance with any mutually agreed

\$ 2. The warranty for Products shall expire one (1), year from first use or eighteen (18) months from delivery, whichever occurs first, except that software is warranted for ninety (90) days from delivery. The warranty for Services shall expire one (1) year after performance of the Service, except that software-related Services are warranted for ninety (90) days.

5.3 If Products or Services do not meet the above warranties, Buyer shall promptly notify Seller in

Noting prior to expiration of the warranty period. Seller shall (i) at its opion, repair or replace defective Products and (ii) re-perform defective Services If despite Seller's reasonable offorts, a non-conforming Product cannot be repaired or replaced, or non-conforming Services cannot be re-performed, Seller shall refund or credit monies paid by Buyer for such non-conforming Products and Services. Warranty repair, replacement or re-performance by Seller shall not extend or renew the applicable warranty period. Buyer shall obtain Seller's agreement on the specifications of any tests it plans to conduct to determine whether a nonconformance exists.

5.4 Buyer shall bear the costs of access for Soller's remedial warranty efforts (including removal and replacement of systems situatures or other parts of Buyer's faculty), de-installation, deconsamination, re-installation and transportation of defective Products to Soller and back to Buyer

- re-instillation and transportation of defective Products to Seller and back to Buyer

  5.5. The warranties and remedies are conditioned upon (a) proper storage, installation, use, operation, and maintenance of Products, (b) Buyer keeping accurate and complete records of operation and maintenance during the warranty period and providing Seller access to those records, and (c) modification or repair of Products or Services only as authorized by Seller in writing. Failure to meet any such conditions renders the warranty null and void. Seller is not responsible for normal wear and tear.

  5.6. This Article 5 provides the exclusive remedies for all claims based on failure of or defect in
- The Article 5 provides the exclusive temedes for all claims based on islaine of or defect in Products or Services, regardless of when the failure or defect airses, and whether a claim, however excribed, it based on contract, warranty, indemnity, ton/estra-contractual liability (including negligence), strict liability or otherwise. The warranties provided in this Article 5 are exclusive and are in lieu of all other warranties, conditions and guarantees whether written, pral, implied or statutory. NO IMPLIED OR STATUTORY WARRANTY, OR WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLIES

#### Confidentiality

- 6. Sciler and Buyer [as to information disclosed, the "Disclosing Pony"] may each provide the other party (as to information received, the "Receiving Party") with Confidential Information in connection with this Contract "Confidential Information" means (a) information that is designated in writing as "confidential" or
- Contract: Confidential Information means (a) information that is designated in writing as "confidential Information" means (a) information that is designated in writing as "confidential" or "proprietary" by Disclosing Parry at the time of written disclosure, and (b) information that is orally designated as "confidential" or "proprietary" by Disclosing Parry at the time of oral or visual disclosure and soft inclinated to be "confidential" or "proprietary" in writing within twenty (20) days after the oral or visual disclosure in addition, prices for Products and Services, shall be considered Seller's Confidential Information

  6.2. Receiving Parry agrees (i) to use the Confidential Information to a competitor of the Confidential Information to third parties, and (iii) not to disclose the Confidential Information to a competitor of Disclosing Parry. Noiwithstanding these restrictions, (a) Seller may disclose Confidential Information to a Silliates and subcontractors in connection with performance of the Contract, (b) a Receiving Parry may disclose Confidential Information to its audions, (c) Buyer may disclose Confidential Information to its audions, (c) Buyer may disclose Confidential Information to its audions, (c) Buyer may disclose Confidential Information to the contract, and (d) a Receiving Parry may disclose Confidential Information to may other third parry with the prior written permission of Disclosing Parry and in each case, only so long as the Receiving Parry brailar a non-disclosure commitment from any such subcontractors, audions, lenders or other permitted third parry ternains responsible for any unauthorized the Confidential Information accept to the eatent that a specific provision of the Contract entitles Receiving Parry to retain a repetite provision of the Contract entitles Receiving Parry to retain a network of the Confidential Information. Seller may also retain on acchive copy of Buyer's Confidential Information. of Buyer's Confidential Information.

  6.3 The obligations under this Acticle 6 shall not apply to any portion of the Confidential Information.
- that (i) is or becomes generally available to life public other than as a result of disclosure by Receiving Party, its representatives or its affiliates, (ii) is or becomes available to Receiving Party on a non-confidential basis from a source other than Disclosing Party when the source is not, to the best of Receiving Party subject to a confidentiality obligation to Disclosing Party; (iii) is independently developed by Receiving Party.

affiliates, without reference to the Confidential Information; (iv) is required to be disclosed by law or valid legal process provided that the Receiving Party intending to make disclosure in response to such requirements or process shall promptly notify the Disclosing Party in advance of such disclosure and reasonably cooperate in attempts to malntain the confidentially of the Confidential Information.

6.4 Each Disclosing Party warrants that it has the right to disclose the Information that it discloses Neither Buyer nor Seller shall make any public announcement about the Contract without prior written approxif the only party. As to any individual tiem of Confidential Information, the restrictions under this Article 6 shall expire five (5) years after the date of disclosure. Article 6 does not supersede any separate confidentiality or nondisclosure agreement signed by the parties

Intellectual Property

- 7 I Seller shall defend and indomnify Buyer against any claim by a non-officiated third party (a. Claim.) 7 I Seller shall defend and indemnify Buyer against any claim by a non-offilioted linid party (a Claim) alleging that Products or Services farmished under this Contract infringe a patent in effect in the U.S. an EU member state or the country of the Site (provided there is a corresponding patent issued by the U.S. or an EU member state), or any copyright or trademark registered in the country of the Site, provided that Buyer of promptly notifies Seller in writing of the Claim, (b) makes no admission of liability and does not take any position adverse to Seller, (e) gives Seller sole authority to control defense and settlement of the Claim, and (d) provides Seller with full disclosure and reasonable assistance as required to defend the Claim, and (d) provides Seller with full disclosure and reasonable assistance as required to defend the Claim and (d) provides Seller with full disclosures and Seller shall have no obligation or liability with respect to any Claim based upon (a) Products or Services that have been modified, or revised, (b) the combination of any Products or Services with other products or services when such combination is a basis of the alleged infirment. (c) failure of Buyer to implement any update provided by Seller that would have prevented the Claim. (d) unauthorized use of Products or Services, or (e) Products or Services made or performed to Buyer's specifications.
- 7.3 Should any Product or Service, or any portion thereof, become the subject of a Claim, Seller may at its option (a) procure for Buyer the right to continue using the Product or Service, or applicable portion thereof, (b) modify or replace it in whole or in part to make it non-infringing, or (c) failing (a) or (b), take back infringing Products or Services and refund the price received by Seller attributable to the infringing Products or
- Services.
  7.4 Article 7 states Selier's exclusive liability for intellectual property infringement by Products and
- 7.5 Each party shall retain ownership of all Confidential Information and intellectual property it had prior to the Contract. All new intellectual property conceived or created by Selter in the performance of this Contract, whether alone or with any contribution from Buyer, shall be owned exclusively by Selter Buyer agrees to deliver assignment documentation as necessary to achieve that result

#### Indemnity

Each of Buyer and Seller (as an "Indenrufying Party") shall indentufy the other party (as an "Indenrufying Party") from and against claims brought by a third party, an account of personal injury or damage to the third party's tangible property, to the extent coursed by the negligence of the Indenrufying Party in connection with this Contract. In the event the Injury or damage is caused by John or concurrent negligence of Buyer and Seller, the lass or expense shall be home by each party in proportion to its degree of negligence. For purposes of Seller's indensity obligation, no part of the Products or Site is considered third party property

During the term of the Contract, Seller shall maintain for his protection the following insurance coverage (1) Worker's Compensation, Employer's Liability and other statutory instructor required by law with respect to work related injuries or disease of employers of Seller in such farmels and amount(s) as required by applicable laws, (ii) Automobile Liability insurance with a combined single limit of \$2,500,000 00, and (iii) Commercial General Liability or Public Liability Insurance for bodily injury and property damage with a combined single limit of \$2,500,000 00. If required in the Contract, Seller shall provide a certificate of insurance reflecting such coverage

#### Excusable Events

10. Excusable Events
Seller shall not be liable or considered in breach of its obligations under this Contract to the extent that Seller's performance is delayed or prevented, directly or indirectly, by any cause beyond its reasonable control, or by armed conflict, acts or threats of terrorism, epidemics, strikes or ordine labor disturbances, or acts omissions of any governmental authority or of the Buyer or Buyer's contractors or suppliers. If an excusable event occurs, the schedule for Seller's performance shall be extended by the amount of time lost by reason of the event plus such additional time as may be needed to overcome the effect of the event. If cars or missions of the Buyer or its contractors or suppliers cause the delay, Seller shall also be enabled to an equitable price effectiveness. adiustment

#### Termination and Suspension

11.1 Buyer may terminate the Contract (or the pontion affected) for cause if Seller (i) becomes InsolventBankrupt, or (ii) commits a material breach of the Contract which does not otherwise have a specified contractual remedy, provided that (a) Buyer shall first provide Seller with detailed written notice of the breach and of Buyer's intention to terminate the Contract, and (b) Seller shall have foiled, within 30 days after receipt

and of Buyer's infention to terminate the Contract, and (b) Seller shall have foiled, within 30 days after receipt of the noise, to commence and dilgently pursue cure of the breach.

11.2 If Buyer terminates the Contract pursuant to Section 11.1, (i) Seller shall retimburse Buyer the difference between that portion of the Contract Price allocable to the terminated acope and the actual amounts estationably incurred by Buyer to complete that scope, and (ii) Buyer shall pay to Seller (a) the portion of the Contract Price allocable to Products completed, (b) lease fees incurred, and (e) amounts for Services performed before the effective date of termination. The amount due for Services shall be determined in accordance with the milestones and yet achieved and where there is no milestone schedule (for completed milestones) and rates set forth in the Contract (for work toward milestones and/or rates in the Contract, at Seller's then-current standard time and material rates.

11.3 Seller may suspend or terminate the Contract (or any affected pontion thereof) immediately for cause if Buyer (i) becomes Instolvent/Bankrupt, or (ii) materially breaches the Contract, including, but not finished to, Gilliare or delay in Buyer providing Payment Security, making any payment when due, or fulfilling

limited to, failure or delay in Buyer providing Payment Security, making any payment when due, or fulfilling any payment conditions

any payment conomines.

If 4 If the Constact (or any portion thereof) is terminated for any reason other than Seller's default under Section 11 I. Buyer shall pay Seller for all Products completed, lease fees incurred and Services performed before the effective date of termination, plus expenses reasonably incurred by Seller in connection with the termination. The amount due for Services shall be determined in accordance with the milestone schedule (for completed milestones) and rates set forth in the Contract (for work toward milestones not yet achieved and where there is no milestone schedule), as applicable or, where there are no milestones and or rates in the Contract, at Seller's then-current standard time and material rates. In addition, Buyer shall pay Seller a

in the Contract, in Seller's then-current standard time and material rates. In addition, Buyer shall pay Seller a cancellation charge equal in 60% of the Contract Price applicable to uncompleted made-to-order Products and 15% of the Contract Price applicable to all other uncompleted Products.

11.5 Either Buyer or Seller may terminate the Contract (or the portion affected) upon twenty (20) days advance notice if there is an excussable event (as described in Article 10) lasting longer than one hundred and twenty (120) days. In such case, Buyer shall pay to Seller amounts payable under Section 11.4, excluding the cancellation charge for uncompleted Products.

11.6 Buyer shall pay all reasonable expenses incurred by Seller in connection with a suspension, including, but not limited to, expenses for repossession, fee collection.

demobilization/emobilization, and costs of storage during suspension. The schedule for Sellet's obligations shall be extended for a period of time reasonably necessary to overcome the effects of any suspension.

#### Compliance with Laws, Codes and Standards

- 12.1 Seller shall comply with laws applicable to the manufacture of Products and its performance of Services. Buyer shall comply with laws applicable to the application, operation, use and disposal of the Products and Services
- 12.2 Seller's obligations are conditioned upon Buyer's compliance with all U.S. and other applicable trade control laws and regulations. Buyer shall not trans-ship, re-export, divert or direct Products other than in and to the ultimate country of destination declared by Buyer and specified as the country of ultimate destination on Seller's invoice
  12.3 Natwithstanding any other provision, Buyer shall timely obtain, effectuate and maintain in force
- any required permit, license, exemption, filing, registration and other authorization, including, but not limited to, building and environmental permits, import licenses, environmental impact assessments, and foreign exchange authorizations, required for the lawful performance of Services at the Site or fulfillment of Buyer's obligations, except that Seller shall obtain any license or registration necessary for Seller to generally conduct business and visas or work permits, if any, necessary for Seller's personnel. Buyer shall provide reasonable assistance to Seller in obtaining such visas and work permits.
- 13. Environmental, Health and Safety Matters Quote Number, DA062017-ROUNDRROCK-PBZ R2

- 13.1 Buyer shall maintain safe working conditions at the Site, including, without limitation,
- Implementing appropriate procedures regarding Hazardous Materials, confined space entry, and energization and de-energization of power systems (electrical, mechanical and hydraulic) using safe and effective lock-outolage-out ("LOTO") procedures including physical LOTO or a mutually agreed upon alternative method.

  13.2 Buyer shall timely advise Seller in writing of all applicable Site-specific health, safety, accurity and environmental requirements and procedures. Without limiting Buyer's responsibilities under Article 13, Seller has the right but not the obligation to, from time to time, review and inspect applicable health, safety, security and environmental documentation, procedures and conditions at the Site.
- 13.3 If, in Seller's reatonable opinion, the beakh, safety, or security of personnel or the Site is, or is apt to be, imperited by security ricks, terrorist acts or threats, the presence of or threat of exposure to Hazardous Materials, or unsafe working conditions, Seller may, in addition to other rights or remedies available to it, Materials, or unsate working conditions, Schier may, in admition to other rights of remedies available to execute some or all of its personnel from Site, suspend performance of all or any part of the Contract, and/or remotely perform or supervise work. Any such occurrence shall be considered an excusable event. Buyer shall reasonably assist in any such evacuation.

  13.4 Operation of Buyer's equipment is the responsibility of Buyer. Buyer shall not require or perimit Seller's personnel to operate Buyer's equipment at Site.

  [3.5] Buyer will make its Site medical facilities and resources available to Seller personnel who need
- medical attention.

- (13) Buyer will make its Sub medical actimies and resources available to select personner will need at medical attention.

  (13) 6. Seller has no responsibility or liability for the pre-existing condition of Buyer's equipment or the Site Prior to Seller starting any work at Site, Buyer will provide documentation that identifies the presence and condition of any Hazardous Materials existing in or about Buyer's equipment or the Site that Seller may encounter while performing under this Contract. Buyer shall disclose to Seller industrial hygiene and environmental monitoring data regarding conditions that may affect Seller's work or personnel at the Site Buyer shall keep Seller informed of changes in any such conditions.

  13) 7. Seller shall notify Buyer if Seller becomes aware of (i) conditions at the Site differing materially from those disclosed by Buyer, or (ii) previously unknown physical conditions at the Site differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in those ordinarily encountered and generally recognized as inherent in work of the character provided for in the ordinary and ordina
- 1) 9 Buyer shall indennify Seller for any and all claims, damages, losses, and expenses arising out of or relating to any Hazardous Materials which are or were (i) prosent in or about Buyer's equipment or the Site prior to the commencement of Seller's work, (ii) improperly handled or disposed of by Buyer or Buyer's employees, agents, contractors or subcontractors, or (lii) brought, generated, produced or released on Site by parties other than Seller

14.1 Each gary may at any time propose changes in the schedule or scope of Products or Services
Seller Is not obligated to proceed with any change until both parties agree upon such change in writing. The
written change documentation will describe the changes in scope and schedule, and the resulting changes in

written change documentation will describe the changes in scope and schedule, and the resulting changes in price and other provisions, as agreed.

14.2 The scope, Contract Price, schedule, and other provisions will be equitably adjusted to reflect additional costs or obligations incurred by Seller resulting from a change, after Seller's proposal date, in Buyer's Stite-apecific requirements or procedures, or in industry specifications, codes, standards, applicable laws or regulations. However, no adjustment will be made on account of a general change in Beller's misuafacturing or repair facilities resulting from a change in laws or requisitions applicable to such facilities. Unfacilities under otherwise agreed by the parties, pricing for additional work arising from such changes shall be at Seller's time and material lates. material cates

14.3 It shall be acceptable and not considered a change if Seller delivers a Product that bears a different superseding or new part or version number compared to the part or version number listed in the Contract

#### Limitations of Liability

- 15. Limitations of Liability
  15.1 The total liability of Selfer for all claims of any kind arising from or related to the formation, performance or breach of this Contract, or any Products or Services, shall not exceed the (i) Contract Price, or (ii) if Buyer places multiple order(s) under the Contract, the price of each particular order for all claims arising from or related to that order and ten thousand US dollars (US \$10,000) for all claims not part of any particular
- 15.2 Seller shall not be liable for loss of profit or revenues, loss of use of equipment or systems, interruption of business, cost of replacement power, cost of capital, downtime costs, increased operating costs, any special, consequential, incidental, indirect or punative damages, or claims of Buyer's customers for any of
- any special, consequential, identified or plantified and plantified and plantified or plantified or state of abyter of currents for any or the foregoing types of damages.

  15.3 All Seller liability shall end upon expiration of the applicable warranty period, provided that Buyer may continue to enforce a claim for which it has given notice prior to that date by commencing an action or arbitration, as applicable under this Contract, before expiration of any statute of functions or other legal time limitation but in no event later than one year after expiration of such warranty period

  15.4 Seller shall not be liable for advice or assistance that is not required for the work scope under this
- 15.5 If Buyer Is supplying Products or Services to a third party, or using Products or Services at a faculty owned by a third party, Buyer shall either (1) indennify and defend Seiler from and against any and all claims by, and liability to, any such third party in excess of the limitations set forth in this Article 15, or (ii) require that the third party agree, for the benefit of and enforceable by Seller, to be bound by all the limitations cluded in this Article 15
- 15.6 For purposes of this Article 15, the term. Seller means Seller, its affiliates, subcontractors and suppliers of any tier, and their respective employees. The llmitations in this Article 15 shall apply regardless of whether a claim is based in contract, waternaty, indemnity, tore/extra-contractual liability (including effiguence), strict liability or otherwise, and shall prevail over any conflicting terms, except to the extent that such terms further cestrict Seller's liability

#### Governing Law and Dispute Resolution

16. Lavering Law and suspite Resolution
16.1 This Contract shall be governed by and construed in accordance with the laws of (i) the State of
New York if Buyer's place of business is in the U.S. or (ii) England if the Buyer's place of business is outside
the U.S. in either case without giving effect to any choice of law rules that would cause the application of law
of any other pursifiction (the "Governing Law"). If the Contract includes the sale of Products and the Buyer is
outside the Seller's country, the United Nations Convention on Contracts for the International Sale of Goods

Offsite the Senter's county, the connection with this Contract, including any question regarding its existence or validity, shall be resolved in accordance with this Article 16. If a dispute is not resolved by negotiations, either party may, by giving written notice, refer the dispute to a meeting of appropriate higher management, to be held within twenty (20) business days after the giving of notice. If the dispute is not resolved within thirty (30) business days after the giving of notice. If the dispute is not resolved within thirty (30) business days after the giving of notice, or such later date as may be manually agreed, either party may commence arbitration or court proceedings, depending upon the location of the Buyer, in accordance with the extension.

(a) if the Buyer's pertinent place of business is in the U.S. legal action shall be convened in federal court with jurisdiction applicable to, or state court located in, either Cobb County, Georgia or the location of Buyer's principal place of business, or (b) if the Buyer's pertinent place of business, or (b) if the Buyer's pertinent place of business is outside the U.S., the dispute shall be submitted to and finally resolved by arbitration under the Rules of Arbitration of the International Chamber of Connected ("ICC"). The number of arbitrators shall be one, selected in accordance with the ICC rules, unless the amount in dispute exceeds the equivalent of U.S. \$5,000,000, in which event is

shall be three. When three arbitrators are involved, each party shall appoint one arbitrator, and those two shall shall be three. When three arbitrators are involved, each party shall appoint one arbitrator, and those two shall appoint the third within thirty (30) days, who shall be the Chairman. The seat, or legal place, of arbitration shall be London, England. The arbitration shall be conducted to English. In reaching their decision, the arbitrators shall give full force and effect to the latent of the parties as expressed in the Contract, and if a solution is not found in the Contract, that desiration is shall be final and binding upon both parties, and neither party shall seek recourse to a law court or other authority to uppeal for revisions of his decision.

16.3 Netwithstanding the foregoing, each party shall have the right at any time, at its option and where legally available, to Immediately commence an action or proceeding in a court of competent jurisdiction, subject to the terms of this Centract, to seek a restriction gorder, injunction, or similar order to enforce the confidentiality provisions set forth in Article 6 and or the nuclear use restrictions set forth in Section 19.1, or to seek intention or conservatory measures. Monetary datuages shall only be available in accordance with Section 16.2.

#### Inspection and Factory Tests

Seller will apply its normal quality control procedures in manufacturing Products. Seller shall attempt to accommodate requests by Buyer to winess Seller's factory tests of Products, subject to appropriate access restrictions, if such witnessing can be arranged without delaying the work

#### Software, Leased Equipment, Remote Diagnostic Services, PCB Services

18. Software, Leasted Equipment, Remote Diagnostic Services, ICLB Services is Seller provides any software to Buyer, the Software License Addendum shall apply If Seller leases any of Seller's equipment or provides related Services to Buyer, including placing Seller's equipment at Buyer's site to provide renote Services, the Leaste Addendum shall apply If Seller provides remote diagnostic services to Buyer, the Remote Diagnostic Services Addendum shall apply If Seller provides PCB Services to Buyer, the PCB Services Addendum shall apply If Seller provides PCB Services and Conditions for the Sale of Products and Services, Form ES 104" and the terms of any addendum inconparated pursuant to this Article 18, the terms of the addendum shall take precedence with respect to the applicable scope

#### General Clauses

19. General Clauses
19 I Products and Services sold by Soller are not intended for use in connection with any nuclear facility or activity, and Buyer warrants that it shall not use or permit others to use Products or Services for such purposes, without the advance written consent of Seller 1 ft, in breach of this, any such use occurs less record its parent, affiliates, suppliers and subconicators) disclaims all liability for any nuclear or other damage, injury or contamination, and, in addition to any other rights of Seller, Duyer shall indemnify and hold Seller (and its parent, affiliates, suppliers and subcontractors) learniness against all such liability. Consent of Seller on any such use, if any, will be conditioned upon additional terms and conditions that Seller determines to be acceptable for neglection supisses nuclear liability.

use, if any, will be conditioned upon additional terms and conditions that Seller determines to be acceptable for protection against nuclear liability

19.2 Seller may assign or novate its rights and obligations under the Contract, in whole or in part, only of its affiliates or may assign any of its accounts receivable under this Contract to any party without Buyer's consent. Buyer agrees to execute any documents that may be necessary to complete Seller's assignment or novation. Seller may subcontract portions of the work, so long as Seller remains responsible for it. The delegation or assignment by Buyer of any or all of (is rights or obligations under the Contract without Seller's prior written consent (which consent shall not be unreasonably withheld) shall be void

- 19.3 Buyer shall notify Seller immediately upon any change in ownership of more than fifty percent (50%) of Buyer's volling rights or of any controlling interest in Buyer. If Buyer falls to do so or Seller objects to the change, Seller may (a) terminate the Contract, (b) require Buyer to provide adequate assurance of performance (including but not limited to payment), and/or (c) put in place special controls regarding Seller's Confidential Information.
- Confidential Information.

  19.4 If any Confirst provision is found to be void or unenforceable, the remainder of the Contract shall not be affected. The parties will endeavor to replace any such void or unenforceable provision with a new provision that achieves substantially the same practical and economic effect and is valid and enforceable 19.5 The following Articles shall survive termination or cancellation of the Contract 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 15, 16, 18, 19 and 20.
- 10, 11, 12, 13, 15, 16, 18, 19 and 20.

  19 6 The Contract represents the entire agreement between the parties. No oral or written representation or warranty not contract in this Contract shall be binding on either party. Buyer's and Seller's rights, remedies and obligations arising from or related to Products and Seller less sold under this Contract are finked to the rights, remedies and obligations stated in this Contract. No modification, amendment, rescission or waiver shall be binding on either party unless agreed in writing.

  19 7 Except as provided in Article 15 (Limitations of Liability) and in Section 19 1 (no nuclear use), this Contract is only for the benefit of the parties, and no third party shall have a right to enforce any provision of this Contract, whether under the English Contracts (Rights of Third Parties) Act of 1999 or otherwise.
- - 19.8 This Contract may be signed in multiple counterparts that together shall constitute one agreement

#### US Government Contracts

- 20.1 This Article 20 applies only if the Contract is for the direct or indirect sale to any agency of the U.S. government and/or is funded in whole or in part by any agency of the U.S. government
- 20.2 Buyer agrees that all Products and Services provided by Seller meet the definition of "commercialoff-the-shelf" ("COTS") or "commercial item" as those terms are defined in Federal Acquisition Regulation
  (FAR) 2.101. To the extent the Buy American Act, Trade Agreements Act, or other donestic preference
  requirements are applicable to this Commact, the country of origin of Products is unknown unless otherwise
  specifically stated by Seller is this Commact. Buyer agrees any Services offered by Seller are exempt from the
  Service Contract Act of 1965 (FAR 52.222-11). Buyer represents and agrees that this Contract is not funded in
  whole or in part by American Recovery Reinvestment Act funds unless otherwise specifically stated in the
  Contract. The version of any applicable FAR clause fused in this Article 20 shall be the one in effect on the
  effective date of this Contract. effective date of this Contract
- 20.3 If Buyer is an agency of the U.S. Government, then as permitted by FAR 12.302, Buyer agrees that all paragraphs of FAR 52.212-4 (except those listed in 12.302(b)) are replaced with these Terms and Conditions. Buyer further agrees the subparagraphs of FAR 52.212-5 apply only to the extent applicable for sale of COTS and or connected items and as appropriate for the Comract Price.
- 20.4 If Buyer is procuring the Products or Services as a contractor, or subcontractor at any tier, on behalf of any agency of the U.S. Government, then Buyer agrees that FAR 52 212-5(e) or 52 244-6 (whichever is applicable) applies only to the extent applicable for sale of COTS and or commercial tierro and as appropriate for the Contract Price



Mr. John Alligood Utility Systems Integrator WTP City of Round Rock

October 5th 2017

Dear Mr. Alligood:

### Industrial Solutions

Roger Andrews Senior Sales Manager

Westway Plaza, 11330 Clay Rd Houston TX 77041

T 281-740-2145 Roger,andrews@ge.com

This letter is in reference to GE Industrial Solutions Quotation DA062017-ROUNDROCK-PB2 R2 for the upgrade modifications to the existing GE PowerBreak I (PB1) Breakers located at the Water Treatment Plant in City of Round Rock. Existing PB1 Breakers are now obsolete and have been replaced with the new GE Powerbreak 2 (PB2) Breakers. As the OEM (Original Equipment Manufacturer), GE has developed a retrofit solution for, and is proposing the retrofit of, the obsolete PB1 Breakers with the new PB2 Breakers. This retrofit, utilizing GE equipment and GE Field Services for installation and commissioning, is the only solution recognized by GE, the OEM, for continued operation and reliability.

As the OEM, GE does not recognize any non-OEM breakers as an adequate replacement for the obsolete PB1 Breakers, nor does it authorize any service organization other than GE Services to install and commission the replacement PB2 breakers. GE OEM warranty applies.

Should modifications be made by non-GE service personnel, GE cannot provide, whether implied or otherwise, any equipment or service warranty. Additionally, non-OEM upgrades may void any UL listing on the GE Equipment.

Please feel free to contact us directly should you have questions, concerns, or comments regarding our offering

Sincerely,

Roger Andrews Senior Sales Manager GE Industrial Solutions



Mayor Craig Morgan

Mayor Pro-Tem

Will Peckham

Councilmembers Tammy Young Rene Flores Frank Leffingwell Writ Baese Kris Whitfield

City Manager Laurle Hadley

City Attorney Stephan L. Sheets

September 7, 2017

Attn: Michael Schurwon / Purchasing

## Water Treatment Plant Main Circuit Breaker Replacement Background and Rationale

The City retained CDM Smith to develop an Engineering Report evaluating specific utility infrastructure needs at the Water Treatment Plant. The report includes a recommendation that the Water Treatment Plant Main Circuit Breakers be replaced under a turn-key project by the original equipment manufacturer (OEM), General Electric.

The Circuit Breaker replacement recommendation is based on the IEEE Yellow Book, Maintenance, Operation, and Safety of Industrial and Commercial Power Systems. The existing circuit breakers have become obsolete and replacement parts are no longer available. This is further expanded upon in the following excerpts from the engineering report:

- Quoting section 1.1.3 of the Engineering Report, "Another factor in maintainability is equipment obsolescence. Electrical equipment with electronics may have a useful life of less than 20 years as Manufacturers' designs are upgraded on a shorter design cycle and spare parts are no longer available."
- Quoting section 1.2.1 of the Engineering Report concerning Switchboards DS-2 and MCC-6R/6L, "GE has discontinued manufacturing the Power Break circuit breaker in 2008 and the remaining inventories of these breakers are now depleted."
- Quoting section 3.4 of the Engineering Report, "Switchboard DS-2 and motor control center MCC-6R/6L have obsolete circuit breakers installed within them and it is recommended that they be upgraded by the original equipment manufacturer (OEM). The OEM has provided a quote for the turn-key services required to upgrade/retrofit the discontinued circuit breakers. The replacement would be phased such to minimize any plant downtime. The quote has the proposed work description and is located in Appendix B."

Failure of one or more of the circuit breakers in question would result in the water treatment plant being out of service. With original replacement parts no longer manufactured or available, the downtime of the plant associated with a circuit breaker failure would be significant. The OEM, General Electric, is experienced with upgrading and retrofitting their discontinued circuit breakers. Due to the critical nature of this piece of equipment, the OEM should be used in order to minimalize plant downtime and reduce the risk to the project and water system.

For these reasons, we are requesting the City take CDM Smith's recommendations to hire General Electric to replace the Circuit Breakers as described in Appendix B of CDM Smith's engineering report.

# TECHNICAL MEMORANDUM

WTP & Lake Georgetown Pump & Power Modifications Preliminary Engineering

**Final Report** 





City of Round Rock, Texas

June 2017



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- IEEE Gold Book Design of Reliable Industrial and Commercial Power Systems
- IEEE Emerald Book Powering and Grounding Sensitive Electronic Equipment

### 1.1.3 Maintainable Criteria

Electrical systems require periodic maintenance. Adequate maintenance is a key component of a reliable system. Electrical maintenance activities typically include infrared testing for hot spots, torqueing of electrical connections, cleaning and lubrication of equipment, and testing of protective devices to insure they will function correctly when called upon to do so. With the exception of infrared testing, the electrical maintenance activities described previously must be done with the equipment de-energized. In a continuous process plant such as a water treatment plant, an electrical system design that allows for shutdown of electrical equipment for maintenance yet still maintaining the process is crucial.

Another factor in maintainability is equipment obsolescence. Electrical equipment typically has a useful life of 20 to 30 years depending upon the type of equipment, Electrical equipment with electronics may have a useful life of less than 20 years as Manufacturers' designs are upgraded on a shorter design cycle and spare parts are no longer available.

Finally, heavily loaded electrical equipment in hot, humid, dusty and corrosive environments will require more maintenance and earlier replacement than lightly loaded electrical equipment located in clean climate controlled areas.

The IEEE recommended practices concerning maintenance are contained in:

 IEEE Yellow Book - Maintenance, Operation, and Safety of Industrial and Commercial **Power Systems** 

## 1.2 Existing Electrical Systems

This section provides a brief description of the existing electrical distribution system (EDS) at the CORR WTP and Lake Georgetown RWPS that were evaluated during site visits conducted by CDM Smith.

#### 1.2.1 CORR Water Treatment Plant Electrical System

The CORR WTP EDS receives utility electrical service from Oncor. CDM Smith evaluated five distinct 480-Volt Services at the WTP. The first three services provide power for the High Service Pump Stations and the remaining services provide power to the plant operations building.

The first service leaves a 1500 KVA (kilo-Volt Amperes) utility owned pad-mounted transformer and terminates into two separate Allen Bradley Bulletin 2100 motor control centers (MCC) MCC-1 and MCC-2. Allen Bradley still supports this product line. MCC-1 and MCC-2 are located in the High Service Booster Pump Station building and provide power to the Booster Pumps designated as HSP-01 through HSP-06. The booster pumps have constant speed motors started across-theline. Power factor correction for each motor is achieved via individual capacitor banks located above the MCCs. The building was constructed in 1981 with modifications occurring in 1999 and 2006. The MCCs are in fair condition but deemed at the end-of-useful life given Task 2 objectives and currently have the following deficiencies:



NPFA 70 225.31 and 225.32- Means are required for disconnecting all ungrounded conductors that supply the building. The generator feeder is connected directly to the switchboard bus without means of disconnect.

The fourth and fifth service leave separate 1500 KVA utility owned pad-mounted transformers and terminate into main-tie-main (MTM) switchboards DS-1, DS-2, and MTM MCC-6R/6L respectively. The switchboards and MCC are in fair condition and have the following deficiencies:

- NFPA 70E 130.5 Arc flash risk assessment is required.
- NFPA 70 110.16 Electrical equipment such as switchboards and motor control centers require Arc-Flash Hazard Warning Labels.
- NFPA 70 240.87 Method to reduce clearing time shall be provided for circuit breakers rated 1200A or higher.
- Switchboard DS-2 and MCC-6R/6L- GE has discontinued manufacturing the Power Break circuit breaker in 2008 and the remaining inventories of these breakers are now depleted. Although an engineered solution to replace these breakers has been developed, the overall switchboard is deemed at the end-of-useful life given the age and signs of moderate corrosion on the equipment. The circuit breakers in switchboard DS-1 have the newer version and do not need to be upgraded.

## 1.2.2 Lake Georgetown Raw Water Pump Station Electrical System

The RWPS EDS receives utility electrical service from Pedernales Electric Cooperative (PEC). CDM Smith evaluated three distinct 2400 Volt services at this site. Each service provides power to a stand-alone electrical building.

The first service leaves a 1000 KVA CORR owned pad-mounted transformer and terminates into Siemens-Allis medium-voltage switchgear. The switchgear powers a Siemens-Allis MCC. Siemens still supports this product line. The electrical equipment is located in its own electrical building and provides power to the Raw Water Pumps designated as RWP-04, RWP-05, and RWP-06. The raw water pumps are constant speed motors started across-the-line (ATL). Power factor correction is provided via capacitor banks located adjacent to the MCC. The building was constructed in 1981. The switchgear and MCC are in fair condition and deemed at the end-ofuseful life given their age and Task 2 objectives. The following deficiencies were:

- NFPA 70E 130.5 Arc flash risk assessment is required.
- NFPA 70 110.16 Electrical equipment such as switchgear and motor control centers require Arc-Flash Hazard Warning Labels.

The second service leaves a 1000 KVA CORR owned pad-mounted transformer and terminates into GE 1200 A LimitAmp medium-voltage switchgear. GE still supports this product line. The switchgear in-turn powers three Robicon VFDs. Siemens now owns Robicon and provides support for the Robicon line. The electrical equipment is located in its own electrical building and provides power to the Raw Water Pumps designated as RWP-07, RWP-08, and RWP-09. The



- Connect one of the backwash pumps BWP-01 or BWP-02, and one or more of the high service pumps to SWGR-5. HSPS building will ultimately experience an extended power outage. The use of the existing generator via the new switchgear could be utilized temporarily for backwash pump operations and even high service pump operations while the utility transformer secondary service is installed.
- Remove switchboard DS-5 in its entirety. Connect the remaining loads to the new switchgear.
- Similar type of sequencing could be applied to Electrical Building No. 2 if required.

## 3.4 Plant Operations Phase III and IV Electrical System

CDM Smith investigated two additional 480 Volt services at the plant operations building at the request of CORR. The first and second service terminate into General Electric (GE) switchboards **DS-1**, **DS-2**, and motor control center **MCC-6R/6L**. Switchboard **DS-1** has PowerBreak II type circuit breakers installed and would not require any upgrades. Switchboard **DS-2** and motor control center **MCC-6R/6L** have obsolete circuit breakers installed within them and it is recommended that they be upgraded by the original equipment manufacturer (OEM). The OEM has provided a quote for the turn-key services required to upgrade/retrofit the discontinued circuit breakers. The replacement would be phased such to minimize any plant downtime. The quote has the proposed work description and is located in Appendix B.

