## **CITY OF RIVERSIDE**

# **High Pressure Turbine Stage 2 Nozzle Exchange**

Site: Riverside Acorn Unit Serial: 191-630



Proposal Number: 1480037

Rev: 0

Date: November 25, 2019

#### **General Electric Company Proprietary Information**

The information contained in this document is General Electric Company proprietary information and is disclosed in confidence. It is the property of General Electric and shall not be used, disclosed to others, or reproduced without the express written consent of General Electric. If consent is given for reproduction in whole or in part, this notice and the notice set forth on each page of this document shall appear in any such reproduction in whole or in part. The information contained in this document also may be controlled by the U.S. export control laws. Unauthorized export or reexport is prohibited.



November 25, 2019

To: City of Riverside

Site: Acorn

Attn:

Bryan Atkisson

Role: Plant Manager

GE Power

## **Power Services**

**Stanford Wiley** Services Sales Manager

16415 Jacintoport Blvd. Houston, TX 77015

T 713 305 2146 F 832 553 7229

Subject: High Pressure Turbine Stage 2 Nozzle Exchange ESN 191-630- GE Proposal 1480037

Dear Mr. Atkisson,

GE Packaged Power LLC (hereinafter referred to as "GE" or "Seller") is pleased to provide "CITY OF RIVERSIDE" (hereinafter referred to as "Buyer" or "CITY OF RIVERSIDE") with this proposal 1480037, for the repair/refurbishment of ESN 191-630 Gas Turbine.

Seller's proposal provides three options per Buyer's request

Option #1 - High Pressure Turbine Stage 2 Nozzle Exchange (6 day turnaround

- Seller to exchange Buyer's current Stage 2 Nozzle Assembly with a refurbished Stage 2 Nozzle Assembly
- Field Services to perform swap at Buyer's site

Option#2 - Hot Section Exchange (6 day turnaround)

- Seller to exchange Buyer's Hot Section Assembly with a refurbished Hot Section
- Field Services to perform Hot Section swap at Buyer's site

Option #3 - High Pressure Turbine Stage 2 Nozzle Repair (90 day turnaround)

I look forward to reviewing the benefits of this opportunity with you. If you have any questions about this proposal, please feel free to contact me.

Kind Regards,

#### **Stanford Wiley**

Senior Sales Manager

**General Electric Company Proprietary Information** 

## **Scope of Supply Description**

- Seller will either ship the engine from Buyer's site to Sellers Houston Service Center (HSC) or perform one of the below workscope at the Buyer's site.
  - 1. **Option 1** High Pressure Turbine Stage 2 Nozzle Assembly Exchange
- Refurbished HPT S2 Nozzles
- GE technical support, special tooling and consumables are included
- Twelve-month warranty on the hardware
- Shipping costs (Freight for Hot Section/Tooling to and from Buyer's (Site)
  - 2. **Option 2 -** LM6000PC SAC Hot Section Exchange program includes the following offerings:
- Fully refurbished HPT rotor assembly with all new or refurbished GE OEM S1 and S2 blades
- Fully refurbished HPT S1 nozzle assembly with new or refurbished GE OEM S1 and S2 nozzles
- New or refurbished GE OEM HPT stage 1 & 2 shrouds
- GE technical support, special tooling and consumables are included
- Twelve-month warranty on the hardware
- Shipping costs (Freight for Hot Section/Tooling to and from Buyer's (Site)
  - 3 **Option 3** <u>Firm Fixed Price to repair</u> High Pressure Turbine Stage 2 Nozzle Assembly Exchange assuming at following fall out:
- 40% fall out on Stage 1 Veins
- 20% fall out on Stage 1 and Stage 2 Shrouds
- Additionally, component not usually associated with an overhaul, such as cases, spools, discs, frames or shafts. In case of a major component falling out, attempts will be made to identify rotable replacement hardware as applicable.

Service Bulletins inclusion to be discussed by Seller to Buyer prior to final workscope acceptance

## **Pricing Summary**

Option #1 High Pressure Turbine Stage 2 Nozzle Assembly Exchange

Item	Description	Quantit y	Price
1	HPT Stage 2 Nozzle Exchange	1	\$352,920
2	<ul> <li>Field Services</li> <li>Includes 4 field services reps for two (2) shifts (12 hours shifts/day)</li> <li>Includes 4 field services reps for three (3) shifts (12 hours shifts/day), includes start up and alignment</li> <li>Includes Consumables</li> </ul>	1	\$77,100
	Total - Option 1		\$430,020

## Option #2 Hot Section Rotable

Item	Description	Quantit y	Price
3	LM6000PC Base Hot Section	1	\$1,401,900
4	<ul> <li>Field Services</li> <li>Includes 4 field services reps for three (3) shifts (12 hours shifts/day), includes start up and alignment</li> <li>Includes Consumables</li> </ul>	1	\$77,100
	Total - Option 2		\$1,479,000

Option #3 High Pressure Turbine Stage 2 Nozzle Repair

Item	Description	Quantit y	Price
5	<ul> <li>HPT Stage 2 Nozzle Repair</li> <li>Assumes following fall out:</li> <li>40% fall out on Stage 1 Veins</li> <li>20% fall out on Stage 1 and Stage 2 Shrouds</li> </ul>	1	\$383,100
6	Field Services	1	\$255,500

#### **General Electric Company Proprietary Information**

Item	Description	Quantit y	Price
	<ul> <li>Includes two (2) mobilizations of field service and module shipping</li> <li>Includes 4 field services reps for two (2) shifts (12 hours shifts/day)</li> <li>Includes 4 field services reps for three (3) shifts (12 hours shifts/day), includes start up and alignment</li> <li>Includes Consumables</li> <li>Includes Dolly Rental to hold the engine during repair</li> </ul>		
	Total - Option 3		\$638,600

## **Price Adjustment**

Pricing listed above is for 2019 delivery only and any delivery beyond 2019 will require revised pricing.

## **Scope of Supply and Pricing Notes:**

- 1. GEPP LLC assets offered in this proposal are subject to prior sale.
- 2. Pricing is valid for delivery up to December 31, 2019
- 3. Shipping of rotables to and from customer Site is included in the price
- 4. The prices are exclusive of any Taxes, Local Taxes, VAT, Withholding Taxes, Levies or Import Duties for the Seller's Part(s) or Materials.
- 5. The GEPP LLC supplied asset is covered by a 12-month warranty.
- 6. The GEPP LLC supplied asset includes 100% GE OEM hardware.
- 7. GE Field Service support, special tooling and consumables are included.
- 8. The rotable exchange pricing listed above assumes that the returned asset from the Buyer is in a repairable condition at the time that the asset is title transferred to Seller. This does not apply to parts that have normal wear and tear conditions, consumables and other parts that are scrapped due to normal operating conditions.
- 9. Pricing assumes that Buyer's asset contains all GE OEM Hardware and / or GE OEM Hardware with authorized repairs only. Seller reserves the right to adjust pricing if Buyers returned asset contains any hardware that does not meet the above requirement
- 10. While performing a replacement of Stage 2 HPT Nozzle, in the event hook bolts on the retainer breaks, in such case the engine will require to go to Houston Service Center for remedy and will lead to increase in cycle time for the engine to go back into service and will lead to increase in additional price. Any work performed to fix the hook bolts will be performed on a time and material basis as extra work.
- 11. Seller to notify Buyer immediately of a hook bolt breakage event and shall mutually agree for the new date of engine arrival back at Buyer's site

#### Field Services - Hot Section Removal and Installation

GEPP LLC proposes to provide Removal and Installation Services for the Hot Section exchange or

Stage 2 Nozzle assembly on-site per Option #1 and 2. The following services are provided:

- For the removal and installation of the unit and for the removal and installation of the Hot Section or HPT Stage 2 Nozzle, GE will provide four (4) Aero Technicians.
- Representatives are working 1 shift/day, 12 hour shifts total of three (3) shifts
- One (1) GE technician is provided for Gas Turbine startup
- Removal of the used Low Pressure Turbine, Hot Section
- Installation of replacement Low Pressure Turbine, Hot Section
- · Engine Consumable Kit is Included
- Gas Turbine Lift Fixture and Support Stands
- Preparation of the Removed Hot Section for shipping

## Field Services - Engine Removal and Installation

GEPP LLC proposes to provide Removal and Installation Services for base repair workscope provided above in Option #3. The following services are provided:

- Four (4) GE technicians per shift, working 12-hour shifts
- One (1) GE technician is provided for Gas Turbine startup.
- · Mobilization, Removal of the Engine and ship to Houston Service Center
- Remobilization, Receive and Installation of Engine
- Engine Consumable Kit required for Engine installation is included
- Preparation of the Engine shipping
- Any Buyer caused delays will be invoiced at Time and Material rates per the GE Products and/or Services Terms and Conditions, PSTC/Emma (Standard) (May 2018)
- Engine alignment included
- Field Service portion is estimated at five (5), twelve (12) hour shifts

## Rates, Fees, Payment and Commercial Terms

## **Workscope Fees**

The pricing for the Services work scope set forth in this Proposal and any resulting mutually agreed workscope will be at the rates and fees as follows

Work Scope Item	Amount
Service Center Labor	\$145.00/Hr
Genuine GE LM Unique Parts	Current GE List Less 12%
Genuine GE CF6 Parts	Current GE List
Outside Services	Vendor Invoice Plus 10%
Customer Furnished OEM Hardware	15% of GE List, 10K Cap Per Line

## **Terms of Payment**

Seller will invoice Buyer after the completion of each installment for the percentage amount due. Payment terms from invoice date are shown in the table below.

## Option #1 and 2 - Refurbished Rotable

Installment Description	Percentage of Overhaul Price Due
Upon PO Acceptance	40% Of Contract Price – Net 30 days from Invoice Date
Upon Hardware Shipment	30 % of Contract Price – Net 30 days from Invoice Date
Upon Rotable Hardware Installation and Services Completion	30% of Contract Price – Net 30 days from Invoice Date

## Option #3 - Base Repair Workscope

Installment Description	Percentage of Overhaul Price Due
Upon PO Acceptance	25% Of Initial Contract Price - Net 30 days from Invoice Date
Upon Engine Induction	20% of Initial Contract Price -
Upon Final Workscope Acceptance	Up to 75% of the Contract Price prior to Shipment – Net 30 from Invoice date
Upon Engine Shipment to Site	15% of Final Contract Price – Net 30 from Invoice Date
Upon Engine Installation and	
Generator Testing & Inspection	10% of final Contract Price – Net 30 from Invoice Date
Services Completion	

All invoices to be paid via wire transfer to the instructions contained on each invoice.

## **Delivery to Seller's Service Center**

Delivery will be FOB Buyers Site (Incoterms 2010) and transfer of title for materials and services provided under this proposal pass to the Buyer upon leaving Sellers facility, Risk of Loss remaining with the Buyer during all transportation.

Shipping fees to deliver the Buyer's engine to the Seller's Service Center and back to the Buyer's site will be invoiced at cost +10%, Risk of Loss to remain with the Buyer during all transportation.

## **Delivery and Transfer of Title**

Delivery of the GE supplied rotable asset(s) (herein also referred to as "Parts") will be CPT, "Carriage Paid To" Buyer's facility Incoterms 2010 Buyer's site. Title Transfer will be per the following applicable clause.

• Title to Parts to be shipped from within the country where the Part will be installed shall pass to Buyer upon shipment.

- Risk of Loss shall transfer from Seller to Buyer upon Incoterm defined above
- Title to services transfer as they are performed

Seller will take title to the returning rotable asset upon departure from Buyer's site.

Buyer warrants to Seller and its successors and permitted assignees that the title to the Parts are free and clear of all liens and encumbrances on the date of transfer and Buyer will defend such title forever against all claims and demands.

Buyer further warrants to Seller that Buyer is the beneficial owner of the removed Parts and that Buyer has full right, power, and authority to execute this Bill of Sale.

Buyer will be responsible for any tax or import duties for the Seller's rotable(s) or materials. Buyer is also responsible for any tax or export duties to return Buyer's rotable(s) to designated service center of the Seller.

#### Terms and Conditions of Sale

This Proposal is based on the terms stated herein and incorporated by reference, GE Products and/or Services Terms and Conditions PSTC Emma May 2018 for City of Riverside dated Nov 19 2019 .In the event of any conflict in the terms and conditions between this proposal and GE Products and/or Services Terms and Conditions PSTC Emma May 2018 GE Products and/or Services Terms and Conditions PSTC Emma May 2018 the terms and conditions of the proposal shall govern.

With respect to (i) non-OEM material or OEM Material that has been repaired with a process or by a service provider, that is not authorized by the OEM for those specific parts ("Alternate Material"), (ii) OEM material that has been previously operated in conjunction with Alternate Material, or (iii) any material, whether OEM, or Alternate Material or OEM material that has been previously operated in conjunction with Alternate Material, that is provided by the Buyer to install as part of the Parts or Services supplied herein ("Buyer Supplied Material"), the Parties hereby acknowledge and agree that Seller shall not be obligated to install, reinstall or reuse any of the types of material mentioned in (i), (ii) or (iii) above as part of any Services or Parts supplied herein. If Seller does agree, however, to incorporate any of the types of material mentioned in (i), (ii) or (iii) above as part of any Services or Parts supplied herein, those material will not be covered by any warranty conditions, either express or implied. Buyer further acknowledges and agrees that Seller shall be released from any and all liability associated with the types of material mentioned in (i), (ii) or (iii) above and Buyer shall indemnify, defend and hold the Seller harmless from and against any and all liability arising out of claims made by a third party related to the types of material mentioned in (i), (ii) or (iii) above. Notwithstanding the foregoing, to the extent that Seller, in its sole discretion, is able to re-repair OEM Material that has previously been repaired with a process or by a service provider that is not authorized by the OEM for those specific parts, then Seller's normal warranty shall apply to only those parts that have been re-repaired and reused.

"Outside Services" means those parts, materials, labor and services, including craft labor, which are manufactured by and/or performed by subcontractors or other third parties, including Seller Affiliates, outside of Sellers Service Center Repair Facility.

All components replaced as a result of or part of the <u>FFP</u> module overhaul process in the depot will be dispositioned as GE Owned scrap materials. Materials declared scrap as a part of T&M repair scope will be the Buyers to disposition.

Parts supplied hereunder are manufactured in accordance with GE Distributed Power's standard specifications for industrial gas turbines. These parts are not intended for use and are not certified for use in on-wing aircraft modules or any other application.

This quotation is based solely on the GE terms and conditions referenced herein, and also on the presumptions that (a) no U.S. Government (U.S.G.) funds are being utilized to pay for the goods/services being quoted, (b) there are no U.S.G. terms, conditions or other requirements contained in any resultant sales transaction, and (c) any parts being furnished are not to be used for flight module applications; if any of these presumptions are incorrect, this quotation may be withdrawn by Seller prior to receipt of Buyer's acceptance.

#### **Freight**

Seller will be responsible for freight for **Option #1 and 2** above (i.e. for the Seller's supplied asset(s) to Buyer's (Site/Port of Import) and for the return of the removed asset(s) to the Seller's facility. Buyer will be responsible for any applicable import duties or taxes for Seller's asset(s). Seller is responsible for the freight while the Buyer is responsible for any export taxes and duties to return the Buyer's asset(s) to the designated Seller's facility.

If after 30 days from the date the rotable asset is received by the Buyer, the removed rotable asset has not shipped back to Seller from the Buyer's (Site/Port of Import), a penalty of 0.5% of purchase price per day will be assessed until the date that the asset is shipped back to Seller.

Buyer should contact Feng Gao at 513-552-6829, if they have any questions or issues regarding shipment of the returning asset to Seller.

Buyer shall pay all delivery costs and charges or pay Seller's standard shipping charges plus up to ten (10%) percent for Engine Shipment to/from Buyer's site for **Option# 3.** 

## **Purchase Order Issuance**

If this proposal meets your requirements, please issue the purchase order as follows: and please reference the Proposal Number 1480037 and is governed by GE Products and/or Services Terms and Conditions PSTC Emma May 2018 for City of Riverside dated Nov 19 2019 in the body of the purchase order:

Please issue your Purchase Order with separate line items for the FS installation and the specific options selected to:

## **GE Packaged Power LLC**

16415 Jacintoport Blvd Houston, TX 77015-6589USA USA

e-mail to: Stanford.wiley@ge.com

## **Validity**

This proposal is valid for thirty days (30) from the date of this proposal, subject to prior sale of the offered equipment.

## **Attachments**

Attachment 1: GE Products and/or Services Terms and Conditions PSTC Emma May 2018 for City of Riverside dated Nov 19 2019

Submittal and Acceptance
This proposal submitted by:
Name: <u>Stanford Wiley</u>
Title: Sales Manager
For: <u>GE Packaged Power, LLC</u>
Date: November 25, 2019
Upon acceptance, this Proposal shall constitute the entire agreement between the parties and any understanding, promise, representation; warranty or conditions not incorporated herein shall not be binding on either party:
This Proposal is accepted by:
Name:
Title:
For:

**General Electric Company Proprietary Information** 

Date: