PROPOSAL

Presented To:

EGT Power

for

Removal of (2) General Electric 9E Combustion Turbines and auxiliary equipment

*Prepared By*





Proposal No. 411- XXXX

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EGT Power

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1. **Introduction**

ProEnergy Services (“ProEnergy”) is pleased to provide this proposal to EGT Power (“EGT”) for Removal of Two General Electric 9E Combustion Turbines and associated auxiliary equipment located at the Scottish – Southern Energy Peterhead Power Station.

1. **Work Scope**

ProEnergy will perform the following scope of work for the removal of Equipment further defined in Section 6.1.

Site activities

* Prep all major equipment for removal.
* Disassemble all installed equipment.
* Record and document all individual components per our procedure
* Crate and or load all misc materials and components into shipping containers

Load all materials and components onto transportation (provided by others)

1. **Removal/Relocation Experience**

ProEnergy has performed the following removal/relocation projects:

|  |  |  |
| --- | --- | --- |
| **Customer** | **Site Name** | **Description** |
| Nestle Facility | Fulton, New York | Removal of LM5000 |
| Onondaga Cogeneration LP | Geddes, New York | Removal of LM5000 and LM2500 |
| DQ Holdings | Desert Power | Relocation of 30 MW GE Steam Turbine relocated from Detroit, MI t Rowley UT. 2x1000 hp Gas Compressors relocated from Watertown, NY to Rowley, UT. Relocated 2 Butler Building on site. Relocation and balance of plant equipment on site. |
| Hess Microgen | Interstate Brands | Relocation of 3x Hess Reciprocating Engines and 1 package boiler from Hawaii to California |
| Pacific Rim Energy | Dynergy Site | Relocation of 1x501FD |
| Pacific Rim Energy | Calpine Site | Relocation of 4x50FD |
| Pakistan Power Resources | Anschutz Ranch | Relocation of complete 55MW plant consisting of two (2) RB211-24C, two power turbines, Fuel Gas Scrubber, AC Generator, Lube oil pumps and coolers, waste heat recovery, demineralization system, fuel gas, preheater, msc, etc. to Pakistan |
| Texas A&M University | College Station, TX | Removal of Surplus Equipment: Steam Turbine Generator – (STG3) and Gas Turbine (GTG6) & parts |
| University of Texas | Austin, TX | Removal of Westinghouse W191 Combustion Turbine and Westinghouse Generator |
| Edelca | Southaven Generating Station | Dismantlement and Transportation of Turbines and BOP Equipment form New Orleans to Venezuela |
| Energy Parts Solutions | Various locations | Removal of 7EA’s, LM6000’s, 7FA’s, FT8’s, LM2500’s and FT4’s from various locations worldwide |

1. **Project Execution Plan**

ProEnergy recognizes the importance and magnitude of this project and is ready and committed to make available all of its combined resources, expertise, and experience to ensure that the engineering, procurement, construction, and commissioning of this project is successfully completed. To that end, we have developed this proposal to addresses the challenges and issues of the project. We wish to highlight the following key elements of the proposed project approach:

* + - Assigning a highly experienced team of professionals with experience in optimizing, engineering, designing, procuring materials and equipment, constructing, and de-commissioning power plants.
    - Formal and systematic development of scope, schedule, responsibility, quality and cost on a task-by-task basis to allocate responsibility and ensure the focus of all parties is on meeting or exceeding established project goals.
    - Developing a Project Quality Plan to address the quality related goals.
    - Implementing proven Project Management approaches to effect proactive control of scope, quality, cost, and schedule; report on progress; identify deviations; forecast trends; take corrective actions when necessary; promote communications; and coordinate the activities of all participants on the project. Progress reporting and project coordination will support the project reporting requirements.
    - Providing a continuous involvement of the key management personnel to provide the oversight, commitment, experience and attention required to ensure successful project completion.
    - Use of local subcontractors (as necessary) as integral team members in support of the project. Our relationship with these organizations will take advantage of opportunities to benefit from local practices, infrastructure and experience with past projects in that region.

ProEnergy’s plan to execute this work is based on industry standards and our standard processes developed and tested through and our experience in performing this type of project. The management of the project will be performed at the project site.

The Headquarters Management team will provide the Project Manager responsible for the project and the project support functions required to assist the construction team. The support functions provided by the team includes coordination and logistics, procurement and purchasing, documentation and procedure development, engineering and technical expertise, environmental health and safety, and quality control. The Project Manager will ensure that the Disassembly/Relocation Team is getting sufficient support from these functions to allow the Disassembly/Relocation Team to be most effective.

The Disassembly Team at the site will manage, oversee, and direct the removal of the units. This team will provide direct management of manpower, material control, documentation control, planning and scheduling, and technical direction to perform the work. The Disassembly Team will provide direct feedback for manpower planning, equipment and tool requirements, and consumable materials to perform the work. ProEnergy will provide the engineering and technical documentation required for the plant disassembly/relocation.

Project Management Team

ProEnergy Services will provide a Project Management Team at the headquarters office to support the on-site Disassembly/Relocation Team with the following functions:

* + Overall Project Management
  + Procurement and purchasing services
  + Quality Control / Quality Assurance
  + Environmental Health and Safety
  + Project Scheduling
  + Engineering and technical support
  + Coordination and logistics
  + Human Resources
  + Payroll and finance

The Project Management Team will be managed and coordinated by the Project Manager. The Project Manager will have overall responsibility to ensure that the Disassembly/Relocation Team is meeting the project goals by coordinating and managing the resources for the project.

1. **Assumptions & Clarifications**

The following assumptions have been made in the preparation of this proposal:

* EGT Power to provide back feed power, as required.
* ProEnergy is not responsible for disposal of any regulated or hazardous waste.
* Site is free of all regulated material such as asbestos or lead based contaminants.
* Transportation of equipment from site is provided by others.

1. **Pricing**

ProEnergy will perform the scope of work identified above for the following price.

|  |  |
| --- | --- |
| **Description** | **Price** |
| Pre-Mobilization Activities | $250,000 |
| Site Activities | $5,973,675 |

* 1. Equipment Affected (as defined by EGT Power)

The following equipment will be removed, cataloged, and staged for transportation.

**GE Frame 9E Gas Turbine Plant**

**2 x GE Frame 9E, PG9161, MS9001 (GT 3 & 4)**

**Scope:**

**Disassembly and removal of the following items of plant;**

Gas Turbine with essential auxiliaries.

Gas Turbine Control System Generator, Starter Device and all auxiliary equipment.

Excitation and excitation control equipment.

Gas Supply line and valves from gas receiving station.

Gas Emergency stop valve, governor valve and actuators.

Gas Vent stack, Distillate supply pipeline and valves for connecting into overland supply. Lubricating oil main pump.

AC driven pump, DC Driven pump, Jacking oil pump.

Lubricating oil tanks, filters, coolers and purifiers.

Clean oil tank and pipe work.

All pipework and valves for lubrication system.

Cooling water system including pumps, filters, coolers, fans, pipework and valves.

Air intake filters, silencer, ductwork and ancillary equipment.

Exhaust gas ductwork and silencer.

Exhaust stack.

Auxiliary drive gear unit.

Automatic barring and inching gear.

Control oil supply including pumps, filters, valves, actuators and pipework.

Gas Generator protection equipment.

Plant supervisory and condition monitoring equipment.

Pressure, temperature, vibration and flow measuring instrumentation.

Local instruments, gauges, controls and panels.

Gas Turbine enclosure and ventilation equipment.

Gas Detectors and display panel

Fire protection equipment

Fire alarm systems

Gas Detectors and display panel

11kV switchgear

415V Unit boards

415V Common services boards

DC & emergency systems, batteries, chargers, uninterruptible power supply systems

Unit / system earthing transformer, starting transformer and VT connections

Current transformers

Voltage transformers

Station transformers

Cabling, earthing and lighting protection

HV and LV power cabling

Muticore, Multipair and MICS cables

Special maintenance tooling.

Full set of Manuals and Plant drawings

1. **Terms & Conditions**

This proposal shall be valid for thirty (30) days; provided, however, the obligation to treat this proposal as confidential, and that it cannot be shared with any third party without the prior written consent of ProEnergy shall survive.

This proposal, and any resulting contract or agreement, shall be subject to terms and conditions to be mutually agreed upon between ProEnergy and EGT Power.

1. **Follow Up**

Please contact the following person at ProEnergy for information regarding this proposal:

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