

PROPOSAL

Presented To:

ENELVEN

For

70MW (ISO) Power Plant Equipment

Prepared By



Proposal No. 709-2805

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Corpoelec-Enelven

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1.0 Introduction

ProEnergy Services (“ProEnergy”) is pleased to provide this proposal to Enelven (“Enelven”) for one Power Plant of 70MW (ISO) consisting of (1) GE LM2500PE and (1) LM6000PC Gas Turbines.

The GE LM2500PE & LM6000PC are highly reliable, mid-sized packaged power plants developed for either 50 or 60 hertz applications with design emphasis placed on energy efficiency, availability, performance and maintainability.

2.0 Gas Turbine Generator Set Scope of Supply

We are offering two refurbished dual fueled gas turbines generator set a LM2500PE ISO Rated at 22 MW and a LM6000PC ISO Rated at 48 MW which includes the following scope of supply:

LM2500PE

- LM2500PE gas turbine completely refurbished and configured for both natural gas and liquid fuel operation
- Coupling for direct drive at 3600 rpm, 60hz operation
- Weatherproof acoustic enclosure for gas turbine and electric generator
- “Single lift” I beam base plate to support turbine and 23.4 MW Brush generator (13.8KV)
- New or similar Air inlet filtration system for GT combustion air, generator cooling air and compartment ventilation systems.
- Turbine exhaust system including industrial grade silencer and stack
- Separate lube oil systems for turbine and generator including fin-fan coolers
- Electro hydraulic starting system
- Fire detection and extinguishing system
- New or Refurbished Electronic control panel for gas turbine & generator including 24v control batteries and charger
- Gas turbine water wash system
- Neutral and line side cubicles mounted including CT’s and lightning arrestors (ProEnergy’s electrical scope ends at these cubicles)
- One modular control room with Turbine Control Panel, Generator Control Panel, GTG MCC’s, batteries and chargers.

LM6000PC

- One (1) Gas Turbine Generator, GE Aero, LM 6000 PC-NGW, Natural Gas, Sprint Package
- Air Cooled GE Generator
- Lifting/ spreader beams available for lifting the GT/Gen package (beams only)
- Inlet Anti-Ice Coil for glycol circulation (Coils are located on the air inlet for the turbine only)
- Inlet Anti Icing System (Steam/Glycol Heat Exchangers/circulation skid module)
- Lube Oil Systems with shell and tube coolers (Lube Oil enclosure contains only the hydraulic jacking pump and hydraulic oil reservoir, turbine lube oil reservoir and tube and shell coolers and the water wash heating tank)
- GT 1 Control Cubicle, which contains the GT 1 Turbine Control Panel which consists of the following controls:
 - Synchroscope with pistol grip controller for Generator with manual-off generator auto
 - PM 295 Power Analyzer for the generator
 - Excitation Null Meter
 - Generator Breaker Control pistol grip controller with Trip/Close
 - PF/VAR pistol grip controller with Voltage-PF-VAR
 - Manual Regulator Voltage pistol grip controller with Lower-Normal-Raise
 - Generator Exciter Voltage Regulator with pistol grip controller with Manual-Normal-Auto
 - Automatic Regulator Voltage pistol grip controller with Lower-Normal-Raise
 - Brush Prismic A30 Excitation Control, HMI into the GE Series 6 and FANUC 90/70
 - Emergency Stop Button
 - Control Selector Switch with pistol grip controller with Local-Remote
 - Governor pistol grip controller with Lower-Normal-Raise
 - Beckwith Electric Company Generator Integrated Protection System
- GT 1 termination Cubicle which consists of the following, termination points for inputs into the GT 1 Turbine Control Panel and into the Allestec Corporation Model 800 natural gas and fire monitoring system for the Gas Turbine and Generator Enclosures and the Bently Nevada 3500 Vibration Monitoring System for the Turbine and Generator.

- Remote work station consisting of the following: A Dell PC and keyboard with a 29 inch Samsung flat screen monitor.

Neutral Cubicle with ground resistor located next to the Generator Enclosure.

- Noise reduction enclosures:
 - Auxiliary Module (located above the lube oil enclosure)
 - Sprint Skid
 - Water Injection Skid (two (2) such enclosure, one for each NOX reduction Pumps)
- Pulse Air Filter/Pre Filter (The Equipment has an air intake filter self supporting housing for the turbine and generator with local control mounted on the structure for the pulse air system)
- Sprint Power Boost (The Equipment is equipped with a GE supplied water Sprint System)
- Standard Documentation consisting only of the following:
 - GE Aero Energy Products, A GE Power Systems Business, LM 6000, Gas Turbine-Generator Set 60 Hz, Installation Manual
 - GE Aero Energy Products, A GE Power Systems Business, LM 6000 Gas Turbine-generator Set 60Hz, Installation Manual, July 2002,
 - GE Aero Energy Products, A GE Power Systems Business, Gas Turbine-Generator Set 60 Hz, Basic Operator's Course, March 2003
 - GE Aero Energy Products, A GE Power Systems Business, LM 6000, Gas Turbine-Generator Set 60 Hz, Book 1 of 2 and Book 2 of 2, Basic Operator's Course and Package Maintenance Course, April 2003
 - GE Industrial Aero Derivative, Gas Turbines, LM 6000, SAC, GEK 105059, Model-PC, Volume 1 &11, On-Site Operation and Maintenance Manual
 - GE Aero Energy Products, A GE Power Systems Business, LM 6000, Gas Turbine-Generator Set 60 Hz, Advanced Systems & Controls, Training Course (Millennium-MARK VI / FANUC 90/70) April 2003
 - GE Aero Energy Products, A GE Power Systems Business, LM 6000 Gas Turbine-Generator Set 60 Hz, Operational and Maintenance, Manual, Volume I, II, III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIV, XV. August 2002
- Standard Enclosure for Turbine and Generator
 - Ventilation System
 - CO2 Fire Suppression System mounted in a separate enclosure next to The generator

- Water Injection for NOX Reduction (Duplex Rotojet Pumps, separate enclosures)

Exclusions

ProEnergy has excluded the items listed below from our offering. Any other equipment or service not described in our proposal is also excluded.

- Balance of plant and energy optimization controls
- Buildings, foundations, anchor bolts, embedments and grouting
- Bus bars and bus duct beyond generator lineside and neutral enclosures
- Distributed plant control
- Filter house support structure – other than standard
- Field Supervision
- Fuel, fluids and chemicals
- Fuel storage tanks, forwarding equipment and primary fuel filter
- Gas compression, filtration and separation or regulation equipment
- High voltage transformer(s), cables, switchgear and associated equipment
- Interconnecting piping, conduit, and wiring between equipment modules (site layout is unknown at this time)
- Plant utilities
- Power plant calibration tools and ordinary hand tools
- Spare parts (quoted separately)
- Transportation to job site and off loading of equipment
- Water injection pressurization equipment
- Water treatment and purification equipment
- Yard light and fences

3.0 Pricing

Pricing references the scope of equipment and service work described in this proposal:

- Two (2) GE Gas Turbines (1) LM2500PE & (1) LM6000PC gas turbine generators
- New or refurbished GT Controls
- Overhauled and tested gas turbine to GE Standards

Equipment is subject to prior sale until down payment is received.

3.1 Equipment Pricing

- \$TBD Each
- \$TBD Total

3.2 Payment

This proposal and pricing is based upon receipt of the progress payments shown below:

- Down Payment: \$TBD USD to initiate procurement for refurbishment and to take the units off the market. **Non-refundable**
- Balance: \$TBD USD upon notice of readiness to ship.

Name: ProEnergy Services LLC

Bank: US Bank

Routing # 081000210

Account # 152305958703

Swift Code: USBKUS 44IMT (that is an “i” not a 1)

3.3 Taxes, Duties and Fees

No sales or use taxes have been included in this quotation. These prices quoted exclude any federal, state or local taxes or fees which may be associated with the export, import or purchase of equipment and/or services.

4.0 Schedule

ProEnergy expects to prepare the equipment for shipment Ex-works within Forty Five (45) days after receipt of down payment.

5.0 Warranty

ProEnergy will provide a one (1) year warranty on the entire gas turbine generator package and any other balance of plant equipment provided.

6.0 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.

ProEnergy and Enelven will negotiate in good faith to establish general terms and conditions that are usual and customary of the sale of used equipment.

7.0 Site Services

ProEnergy would be pleased to also provide a proposal for the installation, startup and commissioning of the facility. This would include providing construction supervision as well as startup engineers for all equipment provided.

ProEnergy can also provide an experienced service representative to assist the operating personnel during the first two (2) months after the equipment goes online.

8.0 Follow Up

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

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Attachment A
LM2500PE
BASIC (Typical) SCOPE OF SUPPLY

Gas Turbine

General Electric LM2500 - PE-MG gas turbine, ISO rated at 31,235 HP for continuous duty, with a heat rate of 6772 Btu/HP-hr (LHV). Suitable for base load or peaking, designed for simple cycle, combined cycle or cogeneration service. Turbine is shock mounted and shipped in position, ready to run. Turbine is complete with "last chance" inlet screen and bellmouth seal for protection against foreign object damage.

Generator

Air-cooled generator B.E.M. Model 167ESS (or equal) with brushless excitation, suitable for Class 1, Group D, Division 2 areas, rated at 35,412 KVA @ 0.85 pf, 59°F cooling air, 13,800 volts, 60 Hz. The generator can handle the full continuous power of the gas turbine at any ambient temperature throughout the operating range. Filtered air from the inlet air filter is used to cool the generator. A cooling water loop and its associated fans and pumps are not required. The generator is a utility grade, 2-pole, synchronous design and includes a brushless excitation system with permanent magnet generator. Neutral and lineside cubicles and voltage regulator are also included.

Coupling

The LM2500 gas turbine drives the generator with a dry, flexible-diaphragm coupling that bolts directly to the forged generator hub and the turbine output hub. No gearbox is required. The coupling transmits the full turbine load torque at all operation conditions. The coupling spacer is removed for shipment and is reinstalled at the jobsite by ProEnergy.

Enclosure

Both gas turbine and generator are fully covered by a weatherproof acoustic enclosure. The enclosure is completely assembled and mounted over the equipment prior to testing and shipment. Both turbine and generator compartments are fully ventilated with redundant fans. Explosion-proof AC lighting and DC emergency lighting are provided in both compartments. A bridge crane in the turbine enclosure simplifies engine removal and maintenance.

Baseplate

Full length I-beams are used to support the gas turbine, generator, and air inlet system. This provides single lift capability for the total equipment package. Dowelling of baseplate sections in the field is not required. Lifting spools are incorporated in the baseplate design. A spreader bar and rigging are provided at no charge if returned prepaid to ProEnergy within 8 weeks of shipment. The rigidity of the baseplate is suitable for UBC earthquake Zone 4 installations.

Inlet Air System

ProEnergy furnishes a modular, multi-stage filtration system consisting of weatherhoods and inlet screens, a pre-filter and a final barrier filter. All air for ventilation systems is filtered to the same level as turbine combustion air. Optional anti-ice system, evaporative cooling system and combustion air heating or chilling system are available. Filtered air is silenced before entering the

turbine plenum. This compact arrangement eliminates the need for customer-supplied inlet ducting when the standard design is utilized. Internal lighting of the filter house is provided for inspection and service. Internal and external ladders and platforms for servicing the filter are included.

Exhaust System

The LM2500 package includes a thermally insulated exhaust collector to direct the turbine exhaust gases to an 80"h x 55"w rectangular flange in the side of the main enclosure. Customer furnished expansion joint, ducting; ducting supports and mounting hardware are required for heat recovery applications. For simple cycle, an exhaust silencer assembly may be ordered as an option. Right-hand exhaust, as viewed from the exciter end, is standard. Left-hand exhaust may be ordered as an option.

Piping System

Stainless Steel throughout. Lube Oil, Water and Fuel piping and fittings are Type 304 Stainless Steel. Steam piping and fittings are Type 321 Stainless Steel, and all piping is fabricated in accordance with ANSI B31.1 Power Piping Code requirements. Pipe spools are hydrostatically tested at 1.5 times maximum working pressure. Fuel, steam and high pressure hydraulic piping welds are 100% x-ray inspected. Lube oil piping welds are randomly x-rayed. Turbine and Generator Lube Oil Reservoirs are Type 304 Stainless Steel. The pressure vessels on the turbine baseplate (Water Wash Tanks, Generator Lube Oil Rundown Tanks) are also Type 304 Stainless Steel and are ASME Code stamped.

Fuel System

A natural gas fuel system using an electronically controlled fuel-metering valve is supplied in the basic package. For full-load operation, the gaseous fuel must be supplied to the baseplate at 375 psig \pm 20 psig (lower starting pressures available). Liquid fuel or dual fuel systems are available as factory options. Fuel specifications are included in Section 12. All necessary shutoff valves, piping and instruments between the baseplate connection and the engine are included.

Lube Oil Systems

Two systems - mineral oil for the generator, synthetic oil for the gas turbine. Each lube oil system includes duplex full-flow filters, stainless steel piping and reservoirs and stainless steel trimmed valves. The oil from both systems is cooled by dualcore fin-fan coolers mounted on the enclosure roof. All interconnecting piping is included. The coolers are 100% redundant and either can handle the cooling load. The full-flow oil filters can be serviced during operation. An optional water-cooled design is available utilizing duplex shell and tube coolers for customer installation on a separate foundation.

Electro-Hydraulic Starting Module

Rotates turbine for starting and water washing. The starting system includes a 200 HP electric motor, hydraulic pump, filters, cooler and controls mounted on a separate baseplate. The pump powers a hydraulic starting motor mounted on the turbine auxiliary gearbox. Customer furnishes interconnecting hydraulic piping between hydraulic start module and rotating equipment module.

Digital Control System

The ProEnergy control system provides operating, safety and sequencing controls for the gas turbine and generator. The unit panel is suitable for mounting indoors in a non-hazardous, air-conditioned control room. The panel contains a Woodward programmable, microprocessor-based controller for fuel management and sequencing. Also included are a Bently-Nevada vibration monitor, a manual/auto voltage regulator, a color CRT, and meters and switches for starting, synchronizing, and loading. CRT annunciates alarms and shutdowns, status, analog valves (pressure, temp. etc.), with RS-232 interface to customer DCS. Baseplate mounted equipment includes pressure, level, flow, speed and temperature sensors, plus valves and actuators. 24V DC Nickel-Cadmium batteries and dual battery chargers for control system power are included.

Fire Protection System

The fire and gas detection and extinguishing system includes optical flame detection, hydrocarbon sensing and thermal detectors; complete with factory installed piping and nozzles in both generator and engine compartments. The fire protection system includes cylinders of CO₂ extinguishant mounted on the side of the generator set enclosure. Proenergy furnishes a dedicated 24V DC battery and charger to power the fire protection system. Fire system alarms and shutdowns are annunciated at the turbine control panel. An alarm sounds at the turbine enclosure and unit control panel if the gas detectors sense high gas levels, or if the system is preparing to release the extinguishant. When activated, the primary extinguishant cylinders discharge into both the turbine and generator compartments via multiple nozzles, and ventilation dampers close automatically. After a time delay, the reserve supply of extinguishant is discharged, if required.

"On Line" Cleaning and Soak Wash System

For baseload application, an "on-line" cleaning system is included which allow customers to clean the compressor section of the engine during full power operation. The same system reservoir and piping are utilized for off-line soak washing. Baseplate connections are provided for customer supplied purified water at 15-85 psig and air at 85-120 psig filtered to 20 microns.

Component Testing and Package Full Load Test

The generator is tested to IEEE 115 or IEC 34.3 standards at its factory of manufacture. The gas turbine is performance tested at the G.E. Aircraft Division factory. The entire assembled generator set is then tested at ProEnergy's factory to verify performance guarantees. A full KW load string test of the turbine generator set is performed using the contract controls and auxiliary systems. Water and steam systems are functionally proven but normally not operated during the full load test.

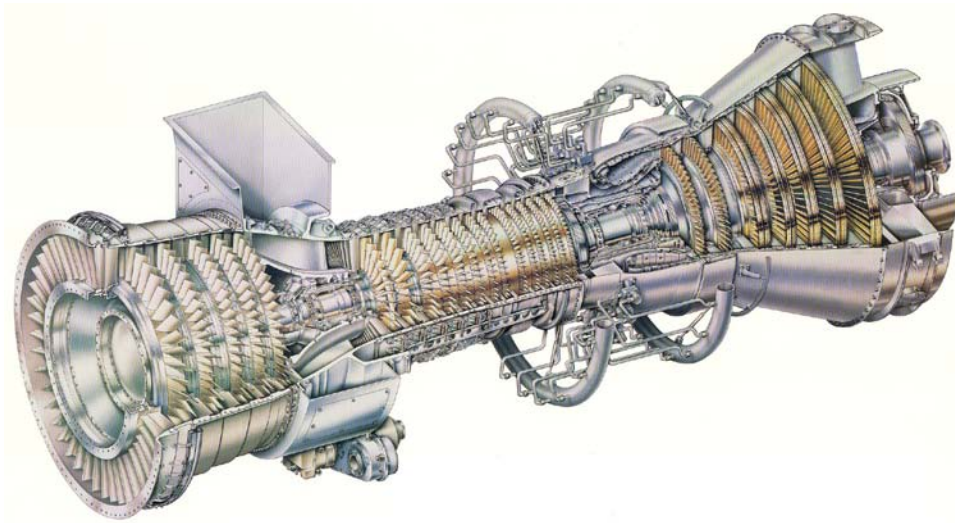
Drawings, Documentation and Manuals

The basic equipment package is supplied with a customer drawing package, which includes general arrangement drawings, flow and instrument diagrams, electrical one-line drawings and a conduit interconnection plan. Additional electrical interconnect and logic drawings are provided for record. Maintenance manuals are provided, printed in the English language, using standard

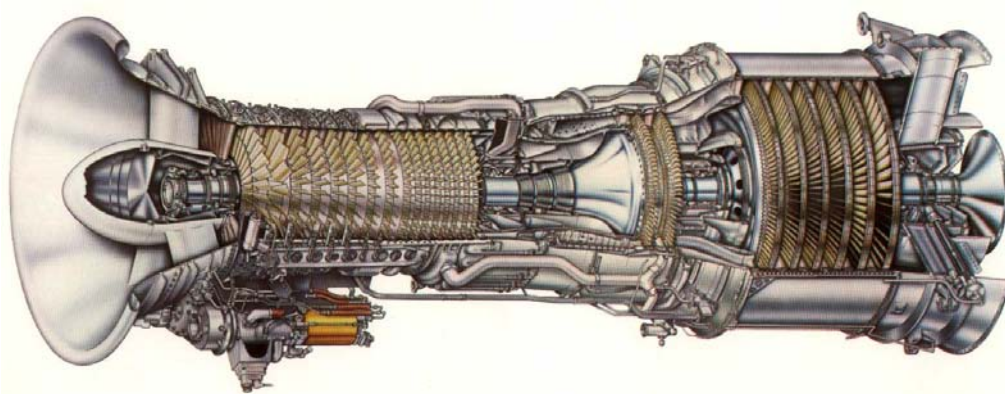
English engineering units. The manuals cover operating concepts for power generating equipment, guides to troubleshooting, and basic information on components and equipment within the turbine generator set.

Training (Optional)

Hands-on training for 10 customer's operators and supervisors. Experienced instructors, using specially developed training materials, provide a firm groundwork of basic theory, plus advanced concepts with classroom and hands-on training.



LM6000PC



General Electric LM2500 Gas Turbine

Attachment B
LM6000PC
BASIC (Typical) SCOPE OF SUPPLY

Gas Turbine

General Electric gas turbine model LM6000 is a two-shaft/two-spool engine consisting of a five-stage low pressure compressor, a fourteen-stage high pressure compressor, a two-stage high pressure turbine, and a five-stage low pressure turbine. The engine is equipped with a stainless steel mesh screen in the inlet air stream for "last chance" protection against foreign object damage. The engine is shock mounted and shipped in position, with the exception of the coupling spacer, which is removed and shipped in a separate container.

Generator

Air cooled, 2-pole generator operating at 13.8 kV, 60 Hz. Generator is capable of handling Purchaser power requirement throughout a wide ambient temperature range. A cooling water loop and its associated fans and pumps are not required. The generator includes a brushless excitation system with permanent magnet generator. Neutral and line side cubicles are included.

Unit Enclosure

The basic equipment package is supplied with weatherproof acoustic enclosures with sound attenuation to an average of 85 dB(A) at 3ft 3 in (1 m) from the face of the equipment at 4 ft 11 in (1.5 m) above ground. The enclosures are completely assembled and mounted over the equipment prior to testing and shipment. The turbine and generator compartment is fully ventilated with belt driven fans. Explosion-proof lighting is provided in both compartments.

Gas Turbine / Generator Baseplate

The basic equipment package is supplied with the support structures for the gas turbine generator set consisting of a two-piece skid assembly, which is sectioned between the gas turbine and the generator. The full depth, bolted section is designed to provide the full structural properties of the wide flange I-beams. Full depth crossmembers are utilized to provide for a rigid design that is suitable for installation in earthquake areas (U.S. Seismic Zone 4) as well as providing a convenient structure for transportation. The baseplate support system is enhanced by the installation of a heavy-duty, welded superstructure, which utilize structural tubing for wall columns and roof beams.

Air Inlet System

The basic equipment package is supplied with a modular, multi-stage filtration system consisting of inlet screens, a prefilter and a final barrier filter. All air for ventilation systems is filtered to the same level as turbine combustion air. An evaporative cooling system is included in the basic equipment package scope. Filtered air is silenced before entering the turbine plenum. This design results in a compact arrangement and eliminates the need for Purchaser supplied inlet ducting when the standard design is utilized. Internal lighting of the filter house is provided to facilitate inspection and service.

Package is also supplied with platforms and ladders to service the inlet filter. These items are packaged separately for shipment. Ladders, platforms and stairways to service other portions of the gas turbine generator enclosure are not included. Special or customized filter arrangements can be supplied, and they are quoted on an individual basis.

Turbine Exhaust

The basic equipment package is supplied with a circular, axial exhaust outlet with connection flange to facilitate in-line mounting of an HRSG or simple cycle exhaust stack.

Fuel System

The basic equipment package is supplied with a natural gas fuel system using an electronically controlled fuel-metering valve. All necessary shutoff valves, piping and instruments between the auxiliary skid connection and the turbine are included. For full-load operation, the gaseous fuel must be supplied to the baseplate at 675 psig \pm 20 (4,658 \pm 138 kPag). All necessary shutoff valves, piping and instruments between the baseplate connection and the turbine are included. Gas fuel must meet General Electric specification MID-TD-0000-1 (See Attachment 16).

Lube Oil Systems

The basic equipment package is supplied with two separate lube oil systems: one for the gas turbine (synthetic oil) and one for the generator (mineral oil). The oil reservoirs and piping are all stainless steel, and the lube oil system valves have stainless steel trim. Each lube oil system has duplex filters, duplex shell and tube coolers, and thermostatically-controlled electric heaters. The coolers, oil reservoir, and filters for each system are mounted on an auxiliary equipment module located next to the gas turbine baseplate. The auxiliary equipment module provides simplified piping connections and reduces Purchaser's installation time and costs. Purchaser must supply cooling water to the shell and tube coolers. Turbine lube oil must meet MID-TD-0000-6 (See Attachment 16).

Electro-Hydraulic Start System

The basic equipment package is supplied with an electric motor driven hydraulic pump assembly, filters, cooler and controls, mounted on the auxiliary equipment module. A hydraulic motor is also mounted on the gas turbine accessory gearbox. Hydraulic hoses are furnished to connect the auxiliary equipment module and the main baseplate.

Fire Protection System

The basic equipment package is supplied with a factory installed fire protection system complete with optical flame detection, hydrocarbon sensing and thermal detectors, piping and nozzles in both generator and engine compartments. The fire protection system includes cylinders containing CO₂ mounted on a separate skid. A 24 V DC battery and charger to power the fire protection system is also included. All alarms and shutdowns are annunciated at the turbine control panel (TCP). An alarm sounds at the turbine if the gas detectors detect high gas levels, or if the system is preparing to release the CO₂. When the system is activated, the package shuts down, and the primary CO₂ cylinders are discharged into the turbine and generator compartments via multiple nozzles, and the ventilation dampers automatically close. After a time delay and if required, the reserve supply of CO₂ is discharged.

Digital Control System

The basic equipment package is supplied with a free-standing control panel suitable for mounting in an indoor, non-hazardous area. The control system features an integrated Woodward MicroNet Plus turbine control system, vibration monitor, digital meter, digital generator protective relay module and an HMI (human machine interface) display of key discrete and analog data. The operator selects HMI displays with convenient touch screen control. Alarm and shutdown events are displayed on the HMI automatically. An Ethernet TCP/IP EGD or RS485 Modbus Port is provided to transmit unit conditions (status, pressures, temperature, etc.) to the Purchaser's distributed control system. Power for the control panel is provided by a dedicated 24V DC battery system with dual 100% capacity chargers, which are shipped separately for installation by others.

Generator Protective Relays

the basic equipment package is supplied with a microprocessor-based generator protective relay module, mounted in the TCP. The protective relay system includes functions necessary for protection of the generator.

Soak Wash System

The basic equipment package is supplied with a turbine cleaning system, which allows Purchasers to clean the compressor section of the turbine during full power operation. The same system reservoir and piping are utilized for off-line soak washing. Auxiliary skid connections are provided for Purchaser supplied purified water at a maximum of 50 psig (345

kPag) and air at 100 – 120 psig (689 – 827 kPag). Purchaser is required to provide purified water meeting MID-TD-0000-4, detergent meeting MID-TD-0000-5 (See Attachment 16), and air filtered to ISA S7.3 standards.

Component Testing and Package Full Load Test

Every new gas turbine is performance tested under load in a GE Test Cell, using procedures developed for flight turbine reliability. The generator is tested to ANSI C50.14 or IEC 34.3 standards at its factory of manufacture.

All gas turbine generator sets receive a rigorous 400-point static test including:

- Switch State (N.O. or N.C., actuation, wiring, and setpoint)
- Temperature element output, and wiring
- Transmitter range, output, and wiring
- Solenoid operation
- Control valve torque motor, excitation, and return signal
- Fire system continuity, and device actuation
- System flushing verification
- Tubing integrity

Drawings, Data and Manuals

The basic equipment package is supplied with a Purchaser drawing package that includes general arrangement drawings, flow and instrument diagrams, electrical one-line drawings and interconnection plan drawings. Additional electrical schematic diagrams and logic drawings are provided for record. See Attachment 11 for a detailed typical list and typical drawing delivery.

Maintenance manuals are provided and are printed in English. The manuals cover operating concepts for power generating equipment, guides to troubleshooting, basic information on components, and equipment within the turbine generator set.

Training (Optional)

The base scope of supply can include as an option hands-on training for up to 10 operators and supervisors, where students are assumed to have at least a journeyman's knowledge of electrical generating plant operation and to be proficient in reading piping flow and instrument drawings, mechanical drawings, and have a working knowledge of electrical generators, and gas turbines. The course is designed around an eight-hour day, five consecutive day schedule with an hour lunch break and fifteen-minute breaks every one and one half hours. Experienced instructors, using specially developed training materials, provide a firm groundwork of basic theory, plus advanced concepts with classroom and hands-on training. Training includes Gas Turbine Familiarization plus System Design & Operations and Maintenance.

The trainer conducts the course in a lecture/seminar format where each major topic is supported by literature with detailed descriptions and associated engineering drawings. A student-training manual is given to each student and the client's turbine-generator system is used for hands-on training to supplement the classroom instruction. At the completion of several related topics the students are given a progressive examination to measure the effectiveness of the presentation and as a tool to identify if any student has not grasped the material. At the completion of the course a final examination is given which covers the entire course material and students are given a certificate of completion.

Improvements and Changes

It is understood that the Seller has the right to make changes in product design and add improvements to products or services at any time without incurring any obligations to install the same on or in connection with the Equipment or Services provided hereunder.

Option A SPRINT® Power Augmentation

SPRINT® boosts engine performance using a demineralized water spray intercooling design that significantly increases the mass flow by cooling the air during the compression process. The system is based on an atomized water spray injected through spray nozzles placed at two locations, one between the high pressure and low-pressure compressors, and the second at inlet bellmouth. Water is atomized using high-pressure air taken off of the eighth stage bleed. The water flow rate is metered, using the appropriate engine control schedules and at the inlet bellmouth. Bellmouth and inter-stage portions on SPRINT® alternate operation based on turbine inlet temperature. Purchaser supplies 30 gpm (114 lpm) of demineralized water to the connection on the unit. Water must meet GE specification MID-TD-0000-3 (See Attachment 16)

Option B NOx Control - Water Injection System

A water injection system for control of NOx emissions shall be provided. The demineralized water injection system consists of inlet strainer, pump, valves, piping and controls for use with a gaseous fuel, liquid fuel or dual fuel system. Water injection shall reduce NOx emissions to 25 ppm (51 mg/N m³) (Ref. 15% O₂) on gaseous fuel. For gaseous fuel applications, Purchaser must provide a demineralized water supply of up to 55 gpm (208 lpm) and at 20-40 psig (138-276 kPag). Water must meet GE specification MID-TD-0000-3 (See Attachment 16). The minimum Purchaser supplied pressure and temperature is determined by the water injection rate required and the type of fuel nozzle utilized.

Option C Transportation Services

Seller arranges for shipment on behalf of the Buyer. The Buyer pays the Seller for all fees and expenses including, but not limited to, those covering preparation of consular documents, freight, loading fees at storage, storage, transit insurance and warehouse-to-wareh

Attachment C
LM2500 PERFORMANCE RATINGS

60 Hertz LM Gas Turbine Generator Sets
PERFORMANCE RATINGS

	Base KW(e)	Btu/kWh, Lhv(kJ/kWh)		No. Shafts	Turbine Shaft Speed, rpm	Exhaust Flow, lb/sec (kg/sec)		Exhaust Gas Temp °F (°C)	
LM1600	13,794	9,593	(10,121)	3	7,000	100.0	(45.4)	909	(487)
LM2500	21,960	9,550	(10,075)	2	3,000	148.0	(67.1)	1,008	(542)
LM2500+	28,540	9,150	(9,653)	2	3,000	188.0	(85.3)	969	(520)
LM2500 STIG 50	27,020	8,620	(9,094)	2	3,000	168.0	(76.2)	941	(505)
LM5000	34,500	9,290	(9,801)	3	3,000	275.0	(124.7)	811	(433)
LM5000 STIG 80	46,360	8,340	(8,799)	3	3,000	330.0	(149.7)	767	(408)
LM5000 STIG 120	49,600	8,110	(8,556)	3	3,000	344.0	(156.0)	752	(400)
LM6000	43,076	8,247	(8,701)	2	3,600	279.0	(127.0)	842	(450)

Specifications subject to change without notice.

Ratings at 59°F (15°C), sea level, no inlet/exhaust losses, natural gas fuel.

Includes Generator and Gearbox losses.

