

Section 3.0 Equipment List - Detailed Division of Responsibility

Material/Responsibility Owner	Qty	Description
Owner	1 Lot	Natural Fuel Gas supply and metered at the PDVSA Station
	1 Lot	Fuel Gas and Liquid Fuel for Commissioning / Start-up that meets the PDVSA Specifications supplied to Contractor by EDC.
	1 Lot	Raw Water Supply from the existing tanks located above the site.
	1 Lot	Raw Water for Commissioning and Startup
	1 Lot	Waste Oil Deposal from the existing Arrecefe Power House
	1 Lot	Permits for Environmental, Importation, Transportation, Operations, etc. to allow plant construction and commercial operations
	1 Lot	Construction & Commissioning Water and 480V three phase power
	1 Lot	Access Roads to site
	1 Lot	Import Duties and Taxes
	1 Lot	Construction lay down area
	1	Fuel Gas Compressor with 50% capacity
	1 lot	Right of Way, easements, etc. to allow proposed interconnects as required
		Gas Turbine Generator
	2	Gas Turbine Generator packages: (1) LM6000 PC & (1) LM6000 PD
	1	Modular Control Building with (2) sets of the following:
		-Turbine Control Panel
		- Generator Control Panel and Protection Panel
		- 24 VDC Batteries and Chargers
		- 125 VDC Batteries and Chargers
		- 125 VDC Rundown motor starter
		- 480V MCC
	1	13.8 KV Generator Breaker NEMA 3R
	1	13.8 KV / 480V 2.3 MVA Transformer
Contractor – ProEnergy EPC Responsibility Civil / Structural		
	1 Lot	Site Preparation, Rough Grading, Excavation, final grading, retaining walls, shotcrete stabilization of the embankments surrounding the plant and fencing
	1 Lot	Construction Tools, Rental Equipment & Rental Cranes
	1 Lot	Temporary Power Distribution
	1 Lot	Plant Concrete Foundations
	1 Lot	Plant Paving, Gravel and Pads for the GTG Turbines and Generators
	1 Lot	Structural piping supports, platforms, ladders, and Misc structural steel supports
		Building
	1	Control Room and Office Building
	1	Demin Water Treatment, Demin Forwarding Pumps, and Firewater Pumps Building
	1	Compressor Building
		Mechanical
	2	Exhaust Stacks with Silencers
	1	Fuel Gas Plant ESD Valve

	2	Dual fuel gas filter skids
Material/Responsibility	Qty	Description
Contractor (continued)		
Mechanical		
	2	50% capacity Fuel Gas Compressors for LM 6000 Plant
	1	Fire Water System with Loop, Monitors and Controls
	1	Demin Water Treatment System
	2	21,000 fiberglass Demin Water Storage Tanks
	2	GTG Duplex Demin Water Filter Skids
	2	Demin Water forwarding Pumps
	1	Duplex Instrument Air Compressor
	1	Oily Water Separator
	1	Waste Oil Tank 5,000 Gallon
	1	Waste Oil Forward Pump
	1 Lot	Pipe, Valves and Fittings with Insulation as required
	1 Lot	Mechanical Labor
	1	Optional 4,000 Ton Inlet Air Chiller with Cooling Tower, Cooling water pumps, and Circulation Pumps.
Electrical		
	1	13.8 KV Generator Breaker Nema 3R
	2	13.8 KV Fused Disconnects (Station Service) NEMA 3R
	2 Sets	13.8 KV Cable Bus from Generator breakers to owner furnished GSUs
	1	13.8 KV / 4160 V 2000KVA Transformer for Fuel Gas Compressors
	1	480 V Distribution Switch board
	1	480 V BOP MCC
	1 Lot	BOP 480/220 V Transformers, Lights, Panels, etc.
	1	120 V UPS System for Control Room
	1	Plant Grounding Grid
	1 Lot	Lightning Protection
	1 Lot	Cathodic Protection for underground steel piping
	1 Lot	Area Lighting
	1 Lot	480 V Welding Receptacles
	1 Lot	Electrical Labor
	1 Lot	Local Subcontractor(s) Civil, Electrical & Mechanical Craft Labor
Instrumentation & Control		
	1 Lot	Plant Instrumentation
	1	PLC based DCS System
	1 Lot	I&C Installation and Construction
Construction		
	1 Lot	Major Equipment Erection
	1 Lot	Mechanical Installation and Construction
	1 Lot	Construction Tools, Rental Equipment & Rental Cranes
	1 Lot	Lubricants, Chemicals, Filters, etc. for Plant Commissioning and Start up
	1 Lot	Balance of Plant Start up and Commissioning Spare Parts

	1 Lot	Transportation of all BOP Equipment to site
Material/Responsibility	Qty	Description
Contractor (continued)		
Construction		
	1 Lot	Plant Commissioning and Performance Testing
	1 Lot	Overall Plant Training
Engineering		
	1 Lot	Conceptual and Detail Design engineering (Total Plant)
	1 Lot	Project Detail Engineering,
	1 Lot	Project Manuals in Spanish including O&M, Warranty, and Engineering Calculations
	1 Lot	As Built Drawings
	1 Lot	Recommended Vendor Spare Parts List
Project Management		
	1 Lot	Project Management with QA/QC, Safety, and Training
	1 Lot	Project manuals in Spanish including project procedures, Systems Turnover Manuals, project implementation, QA/QC, safety and training
	1 lot	Training