

3.0 Equipment List – Detailed Division of Responsibility

Material/Responsibility	Qty	Description
OWNER	1 Lot	Natural Fuel Gas supply at the Arrecifes Power House
	1 Lot	Fuel Gas and Liquid Fuel for Commissioning / Start-up that meets PDVSA Specifications supplied to Contractor by EDC.
	1 Lot	Raw Water Supply and Fire Water Supply will be obtained from the existing TACOA Systems.
	1 Lot	Raw Water for Commissioning and Startup
	1 Lot	Waste Oil Disposal from the existing tank at the Arrecife Power House
	1 Lot	Permits for Environmental, Importation, Transportation, Building, 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 Lot	Right of Way, easements etc. to allow proposed interconnects as required
Owner Supplied Equipment	2	GE LM2500 PE (60Hz) Dual Fueled Gas Turbine Generator packages
	2	Exhaust Stack with Silencers
	2	Modular Control Buildings with: <ul style="list-style-type: none"> • Turbine Control Panel • Generator Control Panel and Protection Panel • 24 VDC Batteries and Chargers • 125 VDC Batteries and Chargers • 125 VDC Rundown motor starter • 13.8 KV Generator Breaker Nema 3R
	3	Fuel Gas Compressors
	2	Liquid Fuel Centrifuges
	1	Instrument Air Compressor
	1	600 KW Black Start Generator
	1	Demin Water Treatment System
	1	Potable Water Treatment System
	2	Liquid Fuel Pumps
	2	Potable Water Pumps
	1	4.16 KV MCC for (3) Gas Compressors
	2	100% Duplex Gas Guel Filter / Coalescer Skids
	1	480 V BOP MCC
	1	Demin Water Forwarding Pump and Filter Skid
CONTRACTOR - ProEnergy EPC Responsibility		Civil/Structural
	1 Lot	Site Preparation, Rough Grading, Excavation, Final Grading 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. (Note: Platforms and ladders for the exhaust stacks to be furnished by Owner)
		Buildings
	1	Water Treatment Building
	1	Liquid Fuel Treatment Shed
	1	Gas Compressor Shed

Material/Responsibility	Qty	Description
Contractor (Continued)		
Mechanical		
	1	Fuel Gas Plant ESD Valve
	1 Lot	Furnish and install carbon steel pipe from tie-in point at the Arrecifes Power House to fuel gas compressors and to each GTG fuel gas filter
	1 Lot	Furnish and Install stainless Steel piping from GTG fuel gas filter to the GTG gas fuel connection
	1	Fire Water System with HDPE Pipe Loop, Monitors and Controls
	2	21,000 Fiberglass Demin Water Storage Tanks
	1	Oily Water Separator
	1	Waste Water Tank 5,000 Gallon w/waste water pump to Truck for disposal
	1	Waste Oil Delivery Pump to Truck for disposal
	4	21,000 Gallon Liquid Fuel Storage Day Tanks
	5	Liquid Fuel Forwarding Pumps
	1 Lot	Furnish and Install carbon steel piping from the liquid fuel supply to the liquid fuel treatment.
	1 Lot	Furnish and Install Stainless Steel piping from the liquid fuel treatment to the liquid fuel day tank, GTG liquid fuel filters and to the GTG liquid fuel connection
	1 Lot	HDPE – steel – SS Pipe, Valves and Fittings with Insulation as required
	1 Lot	Mechanical Labor
Electrical		
	2	13.8 KV Fused Disconnects (Station Service) NEMA 3R
	2 sets	13.8 KV Cable Bus
	2	13.8 KV / 480 V 750 KVA Station Service Transformers
	1	13.8KV/4160 V 2000 MVA transformer for fuel gas compressors
	1	480 V Distribution Switch Board
	1 Lot	BOP 480/240 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	DCS PLC
	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	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 including O&M, Warranty, and Engineering Calculations
	1 Lot	As Built Drawings
	1 Lot	Recommended Vendor Spare Parts List

Material/Responsibility	Qty	Description
Contractor (Continued)		
Project Management		
	1 Lot	Project Management with QA/QC, Safety, and Training
	1 Lot	Project Manuals including Project Procedures, Systems Turnover Manuals, Project Implementation, QA/QC, Safety and Training
	1 Lot	Training