

Options Data Sheet		Project Number		Contractor Document Number		Revision	
		Item Number		Purchaser Document Number		Rev. Date	
Sheet 1 of 7						Revision	
						Rev. Date	
Description	Cross Reference	Requirement / Information					
	Clause	Scope	Purchaser		Contractor		
		Y / N	Standard Options		Compl'nce Y / N	Response	
PERFORMANCE AT SITE CONDITIONS	5						
Provide peak load capability (as defined in ISO 3977-3: 2004, 3.35)	5.1.4		Required				
DISCHARGES AND EMISSIONS	7						
Provide the predicted or measured sound pressure and sound power level noise spectrum	7.3.1		Required				
Near field noise levels shall be measured	7.3.1		Required				
Sound power levels shall be measured in accordance with ISO 9614-1 or ISO 9614-2	7.3.2		Required				
Provide estimated sound levels inside the gas turbine enclosure	7.3.3		Required				
Provide emissions levels for NO _x , CO, UHC, VOC, smoke and particulates at MCR	7.4.3		Required				
Provide emissions levels for NO _x , CO, UHC, VOC, smoke and particulates for MCO and MEL	7.4.3		Required				
Provide a prediction of the start-up emissions from ignition to full load for NO _x and CO for all start conditions	7.4.4		Required				
Supply equipment for continuous monitoring of exhaust emissions	7.6		Required				
Provide estimation and/or measurement of visibility of exhaust stack and oil demister vent plumes	7.8		Required				
CONTRACT FUELS	8						
Gas turbine capable of running on both gas or liquid fuels with on load fuel changeover (in both directions)	8.2		Required				
Supply advice on the capability to provide mixed co- fired fuel operation and maintenance penalties and any operating restrictions	8.2		Required				
Document technical measures to upgrade the combustor, hot gas path components or fuel supply system for out-of-specification fuel	8.3		Required				
If Contractor's fuel supply requirements not met, Contractor to document technical measures to meet the delivery conditions (Option)	8.4		Required				
Non-standard fuels: Purchaser to provide composition / supply condition, Contractor to state experience and impact on maintenance, etc.	8.5		Required				
Provide resources to carry out a specific hazard and operability (HAZOP) study for a non-standard fuel	8.5		Required				
FUEL SYSTEMS AND TREATMENT	9						
Gas fuel supply pressure regulator	9.2		Required				
Gas fuel supply gas compression skid	9.2		Required				
Liquid fuel supply pressure regulator	9.3		Required				
Liquid fuel supply forwarding skid	9.3		Required				
Gas fuel initial filtration / Liquid separator	9.4.1		Separate filter required				
			Separate separator required				
			Combined filter and separator requ'd				
Liquid fuel filter	9.4.2		Required				
Provide fuel flow metering for fuel systems	9.13		Required				
Install on-line component analysis of the fuel gas by chromatography on the fuel supply	9.13		Required				
REGULATIONS, CODES AND STANDARDS	10						
Documentation of proposed method for independent assessment	10.3		Required				
GENERAL COMMENTS							

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OPERATING REQUIREMENTS	11						
Provide fast start option	11.3		Required start time hot (min)				
			Required start time warm (min)				
			Required start time cold (min)				
Provide the expected load / emission overshoots during ramping	11.4		Required				
Gsa turbine shall be capable of providing automatic changes in load to assist grid frequency changes	11.6		Required				
Frequency response requirement	11.6		Frequency sensitive mode required				
			Limited frequency mode required				
Location of HMI	11.7		On gas turbine / Power gen. package				
			Adjacent control room				
			Remote control room within plant				
Offsite remote control function	11.7		Required				
Island mode requirement	11.9		Required				
Black start requirement	11.9		Required				
Black grid restoration requirement	11.10		Required				
QUALITY	12						
Independent inspecting authority / organization to survey the design, construction, inspection and verification of compliance	12.2.3		Required				
RELIABILITY, AVAILABILITY, MAINTAINABILITY	13						
Additional RAM assessment for forced outage factor (FOF), equivalent forced outage factor (EFOF) and equivalent availability factor (EAF)	13.2		Required				
RAM assessment support elements	13.2		Required				
Aero-derivative additional RAM requirement elements	13.2		Required				
Equivalent operating hours (EOH)	13.2.4		Required to ISO 3977-9:1999				
SAFETY REQUIREMENTS	14						
Smoke detectors for control room computer / instrumentation equipment	14.7		Required				
MEASUREMENT, LANGUAGE, IDENTIFICATION AND STANDARDIZATION	15						
HMI or engineering workstation units	15.1		Imperial units				
			Dual imperial and SI				
Gauge units	15.1		Imperial units				
			Dual imperial and SI				
Instrument digital display	15.1		Imperial units				
Colour code piping systems (e.g. ISO 14726)	15.3		Required				
CORROSION PREVENTION, PAINTING AND FINISHING	16						
Special colours for specific items of equipment	16.1		Required				
Variations to the defined painting systems according to Purchaser requirements	16.2.1		Required				
Inspection and test of buried and submerged coatings to Purchaser requirements	16.2.8		Required				
PACKING AND TRANSPORTATION	17						
Preservation for periods > 6 months outdoor storage	17.1		Required				
GAS TURBINE CORE	18						
Additional design life extensions available based on positive experience	18.1.1		Required				
GENERAL COMMENTS							

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GAS TURBINE CORE (continued)		18						
Provide insulation over the hot external surfaces of the gas turbine	18.1.7.3		Required					
Supply forging specific material properties certification for supplied rotor components	18.1.8.1		Required					
Supply forced cooling system to shorten the time taken to cool the unit during shutdown	18.1.8.3		Required					
Provide justification of the overspeed margin capability	18.1.10		Required					
Provide a lateral analysis to identify the resonant frequencies of the complete power generation package	18.1.11.1		Required					
Purchaser balancing results shall be reported, indicating the method used	18.3.2		Required					
Provide redundancy for any external cooling fan device that is a fundamental part of the gas turbine (rotor and casing) cooling system	18.5.2		Required					
GEARBOXES AND COUPLINGS		19						
Vibration monitoring equipment on small auxiliary gearboxes not associated with the main drive train	19.3		Required					
AIR INLET SYSTEM		20						
Filter type	20.1		Pulse system required					
			Static system required					
			Pulse and static					
			Marine (vane and bag system)					
Economic priority rank (1, 2, & 3)	Overall gas turbine output	20.2	1st, 2nd, 3rd					
	Over gas turbine efficiency	20.2	1st, 2nd, 3rd					
	System and system maintenance cost	20.2	1st, 2nd, 3rd					
Percentage area over-capacity above rated flow		20.2	Rated flow %					
HEPA filter to EN 1822		20.2	Required					
Filter test data	Generic efficiency data	20.2	Required					
	Generic wet burst data		Required					
Solid plate filter house floors		20.3	Required					
Filter frames normal to flow and terminate close to outer wall		20.3	Required					
Inlet cooling / power boost	20.5		Inlet fog boost required					
			Evaporative cooler required					
			Inlet chiller required					
			Tube heat exchanger (with site supply of cooling water) required					
Filter house outer panels	20.8		Stainless steel					
			Painted carbon steel					
			Specify other:					
Filter house and ducting support structure	20.8		Stainless steel					
			Painted carbon steel					
			Specify other:					
Filter element support frames	20.8		Stainless steel					
			Painted carbon steel					
			Specify other:					
Hood panel and frame material	20.8		Stainless steel					
			Painted carbon steel					
			Specify other:					
Trash / Insect screen and frame material	20.8		Stainless steel					
			Painted carbon steel					
			Specify other:					
Silencer panels and frame	20.8		Stainless steel					
			Painted carbon steel					
			Specify other:					
GENERAL COMMENTS								