

**EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications**

SL. NO.	ENQUIRY SPECIFICATION				SPECIFICATION REQUIREMENT	COMMENTS / CLARIFICATIONS	Owner's Reply
	SEC/ PART	SUB SEC.	PAGE NO.	CLAUSE NO.			
1.	VII/A	Vol I	2/3	1.01.00 v)	Complete manufacturing including shop testing/type testing.	Type Test: Will the certificate of type test be valid? Or repeat tests are needed? We also propose to discuss with you the equipment which will have type test requirement, since for small motors or pumps which are part of skid, such type test requirement shall not apply	Shop test/Type tests are to be conducted as stipulated in relevant chapters of specification. Certificate produced will not be valid for the equipments identified for shop test/type test in the specification.
2.	VII/A	Vol II	2/10	1.04.00	Land Availability	This needs to be discussed.	Bidder to comply specification requirement.
3.	VII/A	Vol II	4/10	Annexure - IA	Expected Specification of RLNG	Client / Owner is requested to provide firm fuel gas specification for Engine performance evaluation / guarantee. Do we need to consider the Typical fuel gas composition for performance evaluation? Minimum and Maximum fuel gas specifications are also required to be specified. The mentioned gas composition provide minimum and maximum values of individual components in the fuel Gas.	"Typical" composition given as per Annexure-IA of Vol II, Part A shall be considered for guaranteed performance. Please refer Cl. No. 3.01.01 of Vol IV, Part A of Section VI. Minimum and maximum composition will be s per Annexure-IA of Vol II, Part A.
4.	VII/A	Vol II	4/10	Annexure - IA	Expected Specification of RLNG However, the engine shall also be designed to run on gas fuel with methane no. corresponding to at least (-)10% of the methane number calculated on the minimum composition mentioned here above.	Please refer our comment above for minimum fuel gas composition. Once we have the exact minimum fuel gas composition, we can comment / specify on the same.	Minimum and maximum composition will be s per Annexure-IA of Vol II, Part A.
5.	VII/A	Vol III	3/69	2.03.00 vi	Gaseous Fuel Supply and Metering System complete with Last Chance Filter, Piping, Stop/ Control Valves and Distribution Headers etc.	We shall be either vortex or corrolis type gas flow meter for individual GEG. The Fuel gas filter & control valves which is part of Fuel Gas module shall be as per OEM design and requirement.	Please refer clause no. 3.07.00 of Volume III, Chapter III-C, Part B for Gas Flow meter specifications. Accordingly, Bidder's standard and proven practice for Gas Flow meter is also acceptable based on documentary evidence.
6.	VII/A	Vol III	3/69	2.03.00 vii	Start up system including Start up Air compressor & Air Bottle/ Start up system including Start up Air compressor & Air Bottle(s) (Common for all engines)	Start Air compressor system can be common for all engine. However we prefer individual Start air bottle (s) per GEG. Same can be interconnected amongst each other.	Refer Amendment in this regard.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

7.	VII/A	Vol III	3/69	2.03.00 xv	Common or Unitized NOx control system as per standard proven practice of the engine OEM	Kindly note that we have NOx sensor system, which measures the NOx level and the Engine is tuned to maintain the NOx level within 90 ppm @ 15% O2, i.e. 500 mg/nm3 @ 5% O2 even when engine running on part load. For the requirement of 80 PPM @ 15%O2, please refer our comment below.	Bidder to comply with Technical Specifications requirements. Bidder comment not found in the query.
8.	VII/A	Vol III	4/69	7.00.00	Pipes & Fittings	Piping specifications are not available in the tender doc. Request to provide the same. However piping for packaged equipment supplied shall be as per OEM standard design and specifications.	Bidder to refer Cl. 3.02.03 of Chapter M1, Vol I, Part B
9.	VII/A	Vol III	4/69	8.00.00	Paint and primers as required and suitable for the environment/conditions prevailing at site.	Painting specifications are not available in the tender doc. Request to provide the same. However painting of packaged equipment supplied shall be as per OEM standard.	Employer's standard colour coding scheme shall be furnished to the Contractor during detailed engineering stage for all the equipment/pipe/systems. However, OEM standards for gensets and the associated modules shall be reviewed and finalized during detailed engineering stage.
10.	VII/A	Vol III	5/69	11.02.00	Scope of work	Vendor list as mentioned in Part B of technical Specifications is indicative and not complete. Can we follow our standard vendor list and same list to be captured while bidding and performance certificate for the same to be provided later on after award of contract?	Vendor list as provided in Part B of technical specification is indicative with disclaimer notes. The bidder specific vendors list shall be finalized with the successful bidder after mutual discussion. For new vendors, details may be submitted by the successful bidder for NTPC review & acceptance.
11.	VII/A	Vol III	5/69	11.02.00	Scope of work a) & b)	Request to clarify what capacity of sea water purification system is to be envisaged / considered.	Capacity of sea water purification system (Desalination System) to be finalized during detailed engineering based on plant water requirements & other design requirements.
12.	VII/A	Vol III	6/69	11.02.00, J	Effluent treatment system consisting of clarifier/tube settler, oil water separation system etc. to make waste water usable, to the extent possible and to comply with CPCB/SPCB norms for final discharge of remaining water into sea.	Effluent Treatment and Handling system by Client / Owner.	Bidder to comply to Technical Specifications requirements

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

13.	VII/A	Vol III	6/69	12.01.00, a)	Two (2) numbers (2x100%) oil free, rotary screw type air cooled air compressors for instrument air and service air applications for complete plant each of adequate capacity & adequate pressure, with their motor drives and other accessories as per equipment sizing criteria mentioned in Volume-IV (Plant Performance & Design Philosophy), Part-A of Technical Specification. However, minimum capacity of each air compressor shall be 5 Nm ³ /min at discharge pressure of 8.0 Kgf /cm ² (g).	We shall be supplying air cooled reciprocating type compressor and rating shall be as per OEM requirement, sufficient for start and control air system (no separate instrument air compressor is required). We have control air module for instrument air supply for plant and service air requirement. The air receiver shall be designed suitable for 3 start of the engine. The compressors capacity will be sufficient to charge the air receivers from atm to max. pressure required in 60 minutes.	Reciprocating Compressors are now obsolete. Bidder to comply with specification requirements.
14.	VII/A	Vol III	6/69	12.01.00, b)	Two (2) numbers (2x100%) air cooled Air Drying Plants (one for each air compressor) of adequate capacity with all interconnecting piping, valves, fittings, etc.	Control Air module, 1 per 2 Engines including air dryer shall be supplied as per OEM standard design. No separate compressors are required. In case of redundancy, we can supply one additional control air module.	Dedicated air drying plants for IA & SA application has been envisaged. Bidder to comply with specification requirements.
15.	VII/A	Vol III	6/69	12.01.00, c)	One number of Air Receiver of capacity 2 m ³ at the discharge of each Air compressor. (Total: 2 numbers)	Capacity shall be as per OEM requirement.	For better reliability of compressed air system, minimum capacity has been specified for air receivers. Bidder to comply with specification requirements.
16.	VII/A	Vol III	39/69	1.00.00	Compressed Air System, CI-5,7,8	Spares suitable per reciprocating compressor will be supplied.	Bidder to comply with specification requirements.
17.	VII/A	Vol III	6/69	12.02.00	FIRE DETECTION AND PROTECTION SYSTEM	Request to clarify what capacity is to be considered.	Bidder to refer Annexure-II (Page-17 of 36) of Chapter-M4 of Volume-I of Part-B of Technical Specification.
18.	VII/A	Vol III	11/69	14.00.00, i)	Ventilation System	For GEG hall ventilation, we shall be providing Dry Type ventilation system.	Bidder's understanding is correct. The main machine hall shall be ventilated by a combination of roof extractor fans and supply air fans fitted with pre filter & fine filter.
19.	VII/A	Vol III	13/69	16.01.00, a)	The requirements of statutory Authorities (e.g. MOEF, Inspector of Factories, IBR, TAC, CPCB/SPCB/CERC etc. with regard to various plant areas like main plant, Chlorinating Plant, Fire-fighting system, Emission measurements etc.) shall be complied even if not actually spelt out.	This needs to be discussed.	Bidder to comply specification requirement.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

20.	VII/A	Vol III	14/69	16.02.01	Primary instruments like Microprocessor based transmitters employing HART protocol, thermocouples & RTDs along with temperature transmitters, pressure/diff. pressure/temperature/flow transmitter & gauges, flow sensing elements (orifice plates, flow nozzles etc.), Radar type level transmitters, Gas leak detectors, Fuel Gas flowmeter etc. to be provided on as required basis complying the specification requirement specified in Part B.	For Gas Engine, HART instruments re not considered and same shall be as per OEM standard design.	Bidder's proposal is acceptable. Instruments for Gas Engines shall be as per standard and proven practice of OEM, subject to Employer's approval.
21.	VII/A	Vol III	14/69	16.02.01	All the instruments shall be provided to meet the actual system requirements and meeting redundancy and other requirements specified under technical specifications, as per OEM practice, subject to Employer's approval.	For Gas engine, simplex type instruments shall be provided. For rest supplied packaged equipment, we shall check and revert.	Bidder's proposal is acceptable. Instruments for Gas Engines shall be as per standard and proven practice of OEM, subject to Employer's approval.
22.	VII/A	Vol III	15/69	17.01.02	Complete cooling systems as applicable including the necessary piping and pipe supports, valves, necessary tanks, pumps, motors, heat exchangers, strainers, measuring system along with the control panel.	We shall be supplying air cooled Alternator / Generator.	Bidder clarification is in line with specification requirements.
23.	VII/A	Vol III	19/69	18.03.00	All the first fills of consumables such as greases, oil, lubricants, servo fluids / control fluids, chemicals etc. which will be required to put the equipment covered under the scope of specifications, into successful commissioning / initial operation and to establish completion of facilities shall be supplied by the Contractor. Suitable standard lubricants as available in India are desired. Efforts should be made to limit the variety of lubricants to minimum.	This needs to be discussed. However the Diesel Fuel oil required for Emergency / Black start DG set to be provided by Client / Owner.	Bidder to further refer Cl.No. 2.00.00 of Vol VII, Part B of Technical Specification. Diesel Fuel shall also be part of consumables and shall be provided by bidder till completion of O&M period.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

24.	VII/A	Vol III	19/69	19.01.00	The scope of civil, structural and architectural works shall include survey, site clearance including cutting of trees and site levelling by filling with borrow earth/ grading, geotechnical investigations, preparation of design, documents and drawings and getting approval of the same from the Employer and construction of all civil, structural and architectural works including supply of materials for all buildings, equipment and facilities for the project.	The scope of work needs to be discussed and mutually agreed. Request to clarify if the permission and approval for cutting down trees from statutory authority has already been granted to Owner / Client and we don't need to take permission for the same. Also request to clarify, what is meant by site clearance?	Scope of civil work shall be as per specification provided in tender document. The responsibility of site development is with the bidder, however the project site does not attract the provisions of Forest (Conservation) Act 1980. Site clearance means removal of bushes, vegetation trees including roots of trees, surplus excavated earth(soil/rock), any other debris etc. Bidder is also requested to refer cl. no. 6.00.00 of section VI Part-B chapter IV civil work of technical specification regarding site leveling.
25.	VII/A	Vol III	20/ 69	19.02.12	Complete Rigid type road network and connecting these to existing roads. Scope also includes approaches to all facilities/ buildings (including Employer's building), including crossings, culverts, if any.	Please define the road network being referred. Is it being referred to the road network within the power plant boundary?	All the Roads in the plant boundary including periphery road and approaches to all the buildings including Employer's buildings and associated crossings culverts are in bidder's scope.
26.	VII/A	Vol III	21/69	19.02.14	Complete sewage collection including sewage treatment plant and disposal system of the plant and its conveyance either by pumping or by gravity to the sewage treatment plant.	Does it mean connecting the STP plant within power plant building to any main STP plant?	Complete Sewerage system including collection & conveyance of sewage either by pumping or by gravity to the sewage treatment plant, disposal and reuse of treated sewage for horticulture etc. and sewage treatment plant(STP) are in bidder's scope.
27.	VII/A	Vol III	21/69	19.02.23	Implementation of Roof Top Rain water harvesting in plant. Min. 300 m3 size Rain water harvesting tank to be provided within the plant.	Scope and layout / location needs to be discussed and agreed mutually.	Implementation of Rain water harvesting including rain water harvesting tank of minimum 300 m3 is in scope of bidder. Layout/location may be decided by bidder within land boundary and approval by owner. Bidder is requested to refer clause no. 10.00.00 of section VI Part-B chapter IV civil work regarding plant effluent and rain water.
28.	VII/A	Vol III	21/ 69	20.01.00	The Solar Photo Voltaic (PV) installation on Rooftop of various buildings of the Power Plant shall be carried out preferably on shadow free area in such a way that the generation is maximized on each building suitable for installation of Solar PV power plants.	Scope and layout / location needs to be discussed and agreed mutually. Will this be connected to the main grid?	Tender documents are clear about the scope of Solar PV rooftop. Layout and location will be decided during detailed engineering phase. The solar PV rooftop will be integrated with the MCC in the building(or nearest MCC)

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

29.	VII/A	Vol III	23/69	21.06.00	Total duration of the training shall be of 5 (five) man months. The break-up of the training period shall be as following : i & ii Note : For training purposes, one (1) man month implies 30 working days (excluding all intervening holidays) per person	i : We shall revert on One Man month training at manufacturer's works and we request to specify how many people are envisaged for these man-months ii : It may not be possible to provide training at any other site covering erection , commissioning etc. scope. if there is any concession available to exclude training at running site?	Bidder to comply specification requirement
30.	VII/A	Vol III	2/69	23.00.00	Spares	Spares / Tools for commissioning and startup- to be part of OE. Clarity is required for recommended spares. Mandatory spares- Will a separate order be placed for these?	The Contractor shall provide for an adequate stock of startup and commissioning spares to be brought by him to the site for the plant erection and commissioning. These spares/tools must be available at site before the equipments are energized/commissioned. Bidder to comply specification requirements. Bidder to comply specification requirements. No
31.	VII/A	Vol III	39/69	1.00.00	Compressed Air System	Spares suitable per reciprocating compressor will be supplied.	Bidder to comply with specification requirements.
32.	VII/A	Vol IV	2/28	3.01.01	RLNG; Composition as per the 'Typical' composition given in Annexure – IA of Project Information (Vol.- II).	Client / Owner is requested to provide firm fuel gas specification for Engine performance evaluation / guarantee. The Fuel gas specifications provided per Annexure - IA are indicative as mentioned.	Bidder to refer Cl. No. 3.01.00 which states reference conditions for guarantee performance. Annexure-IA of Vol II, Part A to be followed for engine design.
33.	VII/A	Vol IV	3/28	3.01.01	Bidder shall use Hydrogen/Carbon Relation Ratio under GRI method as per ISO/TR 22302:2014(E) for calculating the Methane number for deciding reference point of correction curve as well as for calculating the Methane number of supplied gas during Performance guarantee test. Bidder shall necessarily submit the calculation of reference methane number as mentioned above along with the bid.	Methane number is calculated by software licensed / purchased by OEM, consider proprietary and cannot be shared.	Bidder to comply specification requirement.
34.	VII/A	Vol IV	3/28	3.01.02	Guaranteed performance at above mentioned reference conditions shall be without any output enhancement measure.	Not clear. Request to explain.	Bidder to comply specification requirement.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

35.	VII/A	Vol IV	4/28	3.02.00	Further, following common auxiliaries of the plant shall be in service -	This needs to be discussed. We propose critical dependent and independent auxiliaries that are required for power plant / Gas Genset needs to be taken into consideration to work out the net power output.	Bidder to comply specification requirement
36.	VII/A	Vol IV	4/28	3.02.00	The Power Consumption of entire common auxiliaries shall be the power consumed by the respective auxiliary at design point as determined during shop test. In case shop test power consumption for equipment/system mentioned above is not available, then rated power consumption of the equipment/system shall be taken into account while calculating Net Power Output In case any of the above mentioned equipment/system is not required to be operated during the Performance Guarantee tests, power consumed by the equipment/system shall be taken into account while calculating the Net power output.	The Shop test / test at manufacturer's works shall be carried as per manufacturer's standard test protocols, without any project specific auxiliaries. The clause herewith is needed to be discussed. And in case the above mentioned equipment are required to be operated, then what shall be the performance evaluation criteria?	Shop tests shall be as per relevant sections defined in QA chapter of Part B of specification. Bidder to comply specification requirement. The power consumption of the all mentioned equipments shall be considered as per referred clause of Query.
37.	VII/A	Vol IV	4/28	3.03.00	LHV of the fuel shall be calculated as per relevant codes and standards. Detail procedure for calculating LHV of the fuels shall be finalized at the time of finalizing Performance Guarantee test procedure.	LHV is calculated but software licensed / purchased by OEM, consider proprietary and cannot be shared.	Bidder to comply specification requirement.
38.	VII/A	Vol IV	5/28	4.01.01	Genset units shall be designed to withstand rapid load changes within the frequency band of 47.5 – 51.5 Hz without any restriction.	Noted. However there shall be deration in Engine power as per OEM standard design.	Please refer Cl. No. 4.03.01 of Vol IV, Part A of Technical specification. Genset shall be designed for trouble free and reliable operation in the given range of parameters without Deration.
39.	VII/A	Vol IV	5/28	4.01.04	It shall be possible to start and synchronize Genset units at any grid frequency within the frequency band of 47.5 - 51.5 Hz without any restriction.	The GEG will operate in island mode as there is no grid synchronization required. Hence we do not presume that frequency variation will be this much high in steady state condition. As per IEC 60034, at steady state frequency variation is +/-2% (Zone A). For a limited period of time frequency variation +3% to -5% (Zone B) is allowed for alternator.	i) Grid synchroization with existing A&N system is required. frequency variation as indicated in technical specification to be considered. ii) Bidder to comply with specification requirements

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

40.	VII/A	Vol IV	7/28	4.04.02	Redundancy level in plant equipment and systems shall be such as to support operation of the plant in all specified modes of operation.	This needs to be discussed. There are many instruments that shall be simplex type as per OEM standard Design.	Redundancy has to be ensured for smooth operation of the plant.
41.	VII/A	Vol IV	7/28	4.04.03	The Bidder shall indicate in his offer the expected figures for Reliability and Availability for power plant as whole and major equipment like Engines & Generators/Alternators and substantiate the same by actual experiences at running installations. Further, the Bidder shall necessarily include in his offer the Inspection/Maintenance Guidelines for Engines, Generators/Alternators, pumps, motors and other associated equipment installed in the plant to ensure min. 90% plant availability.	Request to confirm the operating pattern & Cyclic loading of the Genset. This shall be required to work out the O&M schedule and plant availability.	Operating pattern cannot be predicted. Further, Bidder to refer Cl. 4.00.00 of Vol IV, Part A. Specification requirements are clear. Bidder to Comply.
42.	VII/A	Vol IV	8/28	5.02.00	Genset & Support Systems	All the painting of packaged equipment i.e. engine/alternator, auxiliary module, intake air filter, radiator, pumps, compressor shall be as per OEM standard. Other Equipment located outside the GEG hall be designed for coastal climatic condition and painting shall be done accordingly.	Employer's standard colour coding scheme shall be furnished to the Contractor during detailed engineering stage for all the equipment/pipe/systems. However, OEM standards for gensets and the associated modules shall be reviewed and finalized during detailed engineering stage.
43.	VII/A	Vol IV	8/28	6.01.00	The noise levels shall meet the MoEF & CC guidelines as enclosed at Annexure-IA of Volume-IV, Part-A, Section-VI.	Request to provide the same. Not able to find.	Refer Amendment in this regard.
44.	VII/A	Vol IV	9/28	6.02.01	The Guaranteed NOx level (on dry volume basis corresponding to 15% excess oxygen in flue gas) for each Engine shall be as follows: RLNG - less than 80 ppm	This needs to be discussed, as per Emission standard mentioned in MOEF dated 22.12.1998 for Gas / Naphtha based power plants mentions the NOx level to be less than 100 ppm @ 15% O2. Also request to clarify if environmental clearance for NOx Emission level defined as 80 ppm @ 15 % O2, has been obtained by client / owner.	Bidder to comply specification requirement. Environment clearance for the project shall be obtained by Owner.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

45.	VII/A	Vol IV	20/28	15.02.01	The following equipment offered by the Bidder shall be only from such manufacturer(s) who has previously designed (either by itself or under collaboration/Licensing agreement), manufactured/got manufactured the respective equipment(s) of the type and the minimum equipment rating as stipulated below such that the respective equipment should have been in successful operation for a period of at least one (1) year on or before Six (6) months after award date of Andaman & Nicobar Gas Power project package.	Shall be as per OEM standard supplier package.	Bidder to comply Specification requirement.
46.	VII/A	Vol IV	20/28	15.07.03	Successful Bidder shall finalize the agency (ies) for each work in consultation with Engineering- charge at site before engaging them.	This needs to be discussed.	Bidder to comply Specification requirement.
47.	VII/A	Vol V	2/9	1.01.04	Liquidated damages on account of short fall, if any, in "Guaranteed Plant Performance" shall be levied separately for each Genset as identified in clause 3.00.00, of this Volume. However, Plant availability guarantee shall be applicable for the plant as a whole.	Request to confirm which equipment are needed to be considered for plant availability guarantee.	Bidder to refer Cl. 1.02.04 of Vol V, Part A.
48.	VII/A	Vol V	2/9	1.01.05	The quoted "Guaranteed Plant Performance", for each of the offered Genset, shall be deemed to include margins required for the error & inaccuracies of test instruments, method of test, human error and any other cause / uncertainties etc. The "Guaranteed Plant Performance" shall mean "Quoted Guaranteed Plant Performance" in the Guarantee Declaration Schedule without any adjustment for the tolerances.	Calibration adjustment / measurement tolerances should be allowed as per calibration / measurement instruments standard.	Bidder to comply specification requirement.
49.	VII/A	Vol V	3/9	1.02.04	Availability Guarantee of Plant	This to be a part of separate O&M contract. Kindly note that unit generation is a function of load to be applied so it will be based on the running hours + hours where the gensets were available to load but not utilized.	Bidder to Comply.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

50.	VII/A	Vol V	5/9	1.04.03 (c)	Package Air Conditioning (PAC) Unit (i) & (ii)	This needs to be discussed. It may not be necessary that the same site ambient conditions per design value as specified in the documents occurring simultaneously are appearing while demonstrating the performance of PAC.	Capacity rating and performance guarantee of equipment to be established during the month from May to August, when the outside conditions are extremely hot & humid. (Additional heating load if required shall be provided by Bidder).
51.	VII/A	Vol V	6/9	2.02.00	Test Plan	The ITP to be discussed and mutually agreed upon. For packaged equipment, the ITP shall be as per OEM standard test protocols.	Bidder's to refer clause no. 2.02.02 of Vol V, Part A
52.	VII/A	Vol V	9/9	3.00.00	(i) Contractor's aggregate liability to pay liquidated damages for failure to attain the functional guarantee shall not exceed twenty five percent (25%) of the Contract Price.	This needs to be discussed.	Bidder to comply specification requirement.
53.	VII/A	Vol VI	9/71	8.03.02	Instruction Manuals	This needs to be discussed and agreed mutually.	Bidder to comply specification requirement.
54.	VII/A	Vol VI	16/71	8.03.05	e-learning packages shall be supplied for the equipment / system for the following Engine- Generator/Alternator set & auxiliaries along with associated electrical and C&I system.	This needs to be discussed.	Bidder to comply specification requirement.
55.	VII/A	Vol VI	26/71	20.00.00	Quality Assurance Program	We will follow manufacturer std. QAP and good engineering practice for packaged Equipment like engine, alternator, auxiliary module, intake air filter, exhaust gas silencer, radiator, pumps, compressors.	Bidder to meet the specification requirements. Manufacturer QP's of items shall be discussed & finalised during deailed engg.
56.	VII/A	Vol VI	41/71		List of Codes and Standards.	We will follow manufacturer std. codes and good engineering practice for packaged Equipment like engine, alternator, auxiliary module, intake air filter, exhaust gas silencer, radiator, pumps, compressors.	Bidder to comply specification requirement.
57.	VII/A	Vol III	13/69	16.02.01	Measuring Instruments: All instruments shall be provided to meet the actual system requirements and meeting redundancy and other requirements specified under technical specifications, as per OEM practice, subject to employers approval.	Equipment/Instruments mounted on Gen-set shall be as per OEM design	Bidder's proposal is acceptable. The Integral equipments/ instruments mounted on the Genset shall be as per standard and proven practice of OEM, subject to Employer's approval.
58.	VII/A	Vol IV	5/28	4.01.00	Mode of operation : Gen set units shall be designed to withstand rapid load changes within frequency band of 47.5 - 51.5 Hz without any restriction.	As per OEM Standard	Bidder to comply specification requirement.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

59.	VI/B	Vol I - M1	2/19	1.02.01, viii	Designed for continuous operation at any load between 30 -100% of power output for the fuels specified.	Continuous low load operation and loading of GEG below 40% of engine rating is not recommended as per OEM standard design,	Bidder to comply specification requirement.
60.	VI/B	Vol I - M1	3/19	1.02.02	All the piping, fittings, valves, Lube Oil Tanks and complete strainers including body and element shall be of stainless steel. Further all the parts of lube oil coolers which are coming in contact of lube oil shall be of stainless steel.	The piping for packaged equipment shall be as per OEM standard material classification.	Specification requirement is clear, Bidder to comply. However, Integral part of engine can be as per standard practice of OEM.
61.	VI/B	Vol I – M1	3/19	1.02.02.00	Purification System	No additional external lube oil separator is required. The lube oil filter and small engine mounted lube oil centrifuge cleaner is sufficient as per OEM standard design.	Bidder to comply specification requirement.
62.	VI/B	Vol I - M1	4/9	1.02.02.00	Purification System: Type test(s) to be conducted: Particle size impurities test and moisture test as detailed out in the technical specification, is to be carried out on purification system of engine.	As per OEM FAT & QAP	Bidder to comply specification requirement.
63.	VI/B	Vol I – M1	6/19	1.02.03, e	Starting System: By compressed air injected into the cylinders through starting air valves with protection devices.	The starting arrangement is based on two air driven starter motors in parallel, acting on a replaceable ring gear on the flywheel.	Noted. Refer Amendment.
64.	VI/B	Vol I - M1	8/19	1.02.07, b	Frequency convertor for radiator	We shall be providing EC motor driven radiator fans. No VFD shall be required.	Motors shall be as per Section VI Part B Volume II Chapter II E-4.
65.	VI/B	Vol I - M1	8/19	1.02.10	Noise level	Request to provide the same. Not able to find.	Please refer Annexure- I(A) of Vol IV, Part A, Sec VI, Cl. No. 83
66.	VI/B	Vol I - M1	9/19	1.07.00	Engine governing system shall be as per standard and proven practice of the Engine OEM for the offered model of Gas Engine.	We comply with governing class G4.	Bidder to comply specification requirement.
67.	VI/B	Vol I - M1	9/19	1.08.00	Oily Water Handling System	Such large system is not required for Natural Gas based power plant. It is suitable for LFO / HFO based power plants.	Refer Amendment.
68.	VI/B	Vol I - M1	9/19	2.00.01	(ii). Servomotor actuated Stop valve and Control valve, (iii). Distribution piping to the gas burners	As per OEM Standard	Refer Amendment.
69.	VI/B	Vol I - M1	9/19	2.00.02	Redundancy level and type of instrumentation in gas supply system shall be the minimum required for safe and reliable operation of the unit.	The gas module shall be supplied with instrumentation as per OEM standard design.	Bidder to comply specification requirement.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

70.	VI/B	Vol I - M1	11/19	3.02.02, iii	Design, construction, installation and operation of the Flow Meter shall be in accordance with the relevant Recommendations/ Reports from AGA/ API.	Shall be as per OEM standard, non- API.	Bidder to comply specification requirement.
71.	VI/B	Vol I - M1	16/19	7.02.01 e,	Synchronization of the Genset unit and load operation.	Load bank during testing to be provided by owner / Client.	Requirement of Load bank is not understood. Contractor has to demonstrate full load operation after synchronization to grid.
72.	VI/B	Vol I - M2	3/5	1.02.06, viii	Operator's cabin and platform	No separate operator cabin is required.	Bidder's clarification noted for clause no. 1.02.06 of M2/Part-B/Volume-VI. However, Cage ladder to be provided for accessing walkway level. Bidders to refer Amendment in this regard.
73.	VI/B	Vol I - M4	2/36	3.02.00	Areas to be covered by HVW Spray system	If transformers are to be isolated by fire walls as per electricity rules please clarify	Bidder to refer Section VI, Vol II-E7, Cl. No.6.00.00 In this regard
74.	VI/B	Vol I - M4	13/36	6.02.00	Areas to be covered under Inert Gas Extinguishing System a) Central control rooms, control equipment rooms, UPS/Battery charger rooms, PC room, programmer room, PADO room, panel room, etc. of main plant building.	We are considering Inergen Gas at 300 bar pressure for inert gas. Request to confirm the same. We are considering the ASTM A106 Gr.B seamless pipe for inert gas extinguishing system. Request to confirm the same.	Bidder to refer clause 9.06.00 (Total Flooding Inert Gas Extinguishing System), Page-12 of 28, Volume-IV, (Plant Performance and Design Philosophy), Part-A of Technical Specification.
75.	VI/B	Vol I - M4	14/36	8.01.00, ii	To prevent soil corrosion buried pipes / pipes in trench shall be properly lagged with corrosion protective tapes of coal tar type as per IS:15337 or AWWA C 203. The total thickness of protective tapes to be applied on buried pipes / pipes in trench shall be 4.0mm. This can be achieved by using 4.0mm thick tape in single layer or 2.0mm thick tape in double layer.	As all pipes of stainless steel to ASTM A312, Gr. 316L, wrapping coating is not required for buried pipes, however, we consider all the pipes as aboveground on pedestals. Request to confirm the same.	Fire water pipes shall be generally laid over ground on pedestals. However, in man/machine movement area (road crossing/transformer yard/etc.) fire water pipes shall either be buried or in trenches and shall be provided with wrapping & coating.
76.	VI/B	Vol I - M4	14/36	8.01.00 (ii)	Pipe protection for buried pipes	As all pipes of stainless steel to ASTM A312, Gr. 316L, wrapping coating is not required for buried pipes, however, we consider all the pipes as aboveground on pedestals. Kindly confirm	Fire water pipes shall be generally laid over ground on pedestals. However, in man/machine movement area (road crossing/transformer yard/etc.) fire water pipes shall either be buried or in trenches and shall be provided with wrapping & coating.
77.	VI/B	Vol I - M4	16/36	Annexure I	A) SURFACE PREPARATION AND APPLICATION OF PRIMER/PAINT	Foam concentrate tank-MOC of foam tank is SS, hence painting on external/internal surface is not applicable.	Foam System (hence foam concentrate tank) has not been envisaged.
78.	VI/B	Vol I - M4	17/36	Annexure II	Technical Data	Kindly give MOC of Deluge valves, Hose cabinet & Foam equipment etc.	MOC for major components/equipments has been specified at Annexure-II. Further, Bidder to refer clause 9.03.00 Page-11 of 28, Volume-IV, (Plant Performance and Design Philosophy), Part-A of Technical Specification. Foam System has not been envisaged.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

79.	VI/B	Vol I - M4	18/36	Annexure-III	Fire Tender and Fire Station Equipment's	There is no Fire Station appearing in the drawing. If required, please give the quantity of following items to be considered in offer :- Fire water tender/Foam tender/Fire Jeep with trailer pump/Quantity of DCP Powder/Fire suits/Breathing apparatus/Telescopic ladder/Fiber glass blankets/Portable thermal imaging camera	Bidder to refer General Layout Plan (GLP) [6400-999-POC-F-001] enclosed with Chapter-IVD (Civil Works), Volume-IV, Part-B of Technical Specification. For quantity of fire tenders & fire station equipment, Bidder to refer clause 12.02.00, h) Page- 9 & 10 of 69, Volume-III, Part-A of Technical Specification.
80.	VI/B	Vol I - M4	2/36	1.03.00	Fire water source	Please confirm if this desalinated water from the desalinated storage tank.	As mentioned at the referred clause, source of fire water shall be "service water tank (storing desalinated water)" and "rain water harvesting tank". Further, Bidder to refer Chapter-M3 (Water System), Volume-I, Part-B of Technical Specification.
81.	VI/B	Vol I - M4	14/36	7.00.00	Fire water storage tank.... MS water storage.....Equal to 700 cum	Please note that MOC of all pumps, pipes etc. are of SS but Fire Water storage tank has been asked in MS fabrication. In case sea water is going to be used as fire water then MS fabricated storage tanks are not suitable. Please clarify	Bidder to note that: (1) Service water and rain water has been envisaged as firewater. (2) Detailed painting scheme has been envisaged for MS fire water storage tanks as per Annexure-I to Chapter-M4 (Fire Detection & Protection System), Volume-I, Part-B of Technical Specification.
82.	VI/B	Vol II – E1	6/9	2.08.00	Diesel Generating set(s) shall be provided for black start of one main Engine generator set and for safe shut down of the plant under emergency conditions and in case of total power failure. DG set(s) shall be capable of meeting 100 % of essential load requirements including starting of the largest motor (DOL) with other loads (including emergency loads such as lighting, air conditioning etc.) connected without exceeding the permissible starting voltage drop.	We are considering only single GEG critical load for GEG starting. Request to clarify the largest motor to be started, starting current, power factor, voltage drop etc. This shall be required for sizing of the EDG set.	Starting of largest motor, starting current, power factor, voltage drop etc. have to be considered for various auxiliaries which are required for GEG starting. In case no auxiliaries are required for starting of GEG, only GEG critical load shall be considered for sizing of EDG set.
83.	VI/B	Vol II – E1	101 of PDF File	SLD	The fault level of HT switchgear is indicated as 12.5 kA	Short circuit capacity of the 11 kV Switchgear shall be increased as 5 or 6 alternators will be contributing to this. The final value can be determined after receiving the alternator datasheet from vendors.	Pls refer SLD. Alternators are being paralleled at 33kV level.
84.	VI/B	Vol II – E1	101 of PDF File	SLD	4 Auxiliary transformer, 2 PCC and 2 Emergency MCC are shown in the SLD.	As per our standard design, we can have the auxiliary power distribution with 2 Aux. transformer of suitable rating and 1 PCC that will have 2 incomers from the aux. transformer and 1 in-comer from emergency DG.	Number of aux. transformers and PCC (for plant auxiliaries) indicated in tender SLD are indicative depicting typical requirements. Final feeding arrangement for aux. power supply system incl. number of transformers and PCC shall be as per system requirement and shall be finalized during detailed engineering.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

85.	VI/B	Vol II – E2	2/5	3.00.00	Operation requirement for generator: 2. Frequency Variation - 47.5 Hz to 51.5 Hz.	As per IEC 60034, at steady state frequency variation is +/-2% (Zone A). For a limited period of time frequency variation +3% to -5% (Zone B) is allowed	Bidder to comply with specification requirements.
86.	VI/B	Vol II – E2	3/5	4.00.00	All the above temperature measurement devices shall be connected to DDCMIS	Noted but needs more clarity on DDCMIS and Provision for any soft signal between our Cabinets and DDCMIS.	Bidder to comply with specification requirements
87.	VI/B	Vol II – E2	4/5	5.01.00	All panels of excitation system shall be in single suite. It shall be provision of connection to generator MMI through network interface.	As per OEM design Micro-processor based AVR system	Bidder to comply with specification requirements.
88.	VI/B	Vol II – E2	5/5	6.01.01	Type test d) Short circuit heat run test	Alternator supplier cannot perform this test.	Bidder to comply with specification requirements.
89.	VI/B	Vol II – E2	5/5	6.01.02	Type test on Excitation System a) Exciter (If applicable) b) Converter Assembly c) Input and output surge withstand capability test	a) Not applicable b) Not applicable c) Alternator supplier cannot perform this test.	a), b)Applicability shall be decided during detailed engineering as per the system supplied. c) Bidder to comply with specification requirements.
90.	VI/B	Vol II- E3	2/7	5.01.00	MV Bus ducts shall be provided for interconnections between Generators , Transformers and Switchgears	Need clarification. Bus Duct between Generator and transformer can be avoided due to size of Power Plant and area constraint	Busduct is required between generator and generator transformer.
91.	VI/B	Vol II- E3	4/7	8.00.00	a) All measuring CT shall be 0.2 accuracy class and ABT type metering CT shall be 0.2s accuracy class. Protection CT s shall be PS/5P20 as applicable	CTs mounted in Generator shall be as per OEM design. Noted for CTs mounted in Gen Breaker Panel.	Bidder to comply to Technical specification requirement.
92.	VI/B	Vol II- E3	4/7	8.00.00	b) PTs shall be dual accuracy class (3P/0.2)	PTs mounted in Generator shall be as per OEM design. Noted for CTs mounted in Gen Breaker Panel.	Bidder to comply to Technical specification requirement.
93.	VI/B	Vol II- E3	7/7	14.03.00	Radiography (RT) shall be conducted as follows : a) 10% of flexible conductor	These will be done according Vendor's standard	Bidder to comply to Technical specification requirement.
94.	VI/B	Vol II- E3	7/7	15.01.00	a) 10 % radiography and 100% DP test on all site welded joints of bus bar and enclosure.	These will be done according Vendor's standard	Bidder to comply to Technical specification requirement.
95.	VI/B	Vol II- E3	7/7	15.01.00	a) Power Frequency Voltage test	These will be done according Vendor's standard	Bidder to comply to Technical specification requirement.
96.	VI/B	Vol II- E3	7/7	16.01.00	b) Air Leakage test	These will be done according Vendor's standard	Bidder to comply to Technical specification requirement.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

97.	VI/B	Vol II- E3	7/7	16.01.00	c) Water tightness test on outdoor portion of bus duct.	These will be done according Vendor's standard	Bidder to comply to Technical specification requirement.
98.	VI/B	Vol II – E4	2/9	1.05.00	Paint shade shall be as per RAL 5012 (Blue) for indoor and outdoor equipment	As per OEM design for BEAS supplied equipment	Bidder to comply with specification requirements.
99.	VI/B	Vol II – E4	3/9	4.00.00 (b)	Whenever the basis for motor or driven equipment ratings are not specified in the corresponding mechanical specification sub-sections, maximum continuous motor ratings shall be at least 10% above the maximum load demand of the driven equipment under entire operating range including voltage and frequency variations.	Shall be as per OEM standard.	Bidder to comply with specification requirements.
100.	VI/B	Vol II – E4	3/9	4.00.00	Rating : Maximum continuous motor rating shall be at least 10% above the maximum load demand of the driven equipment under entire operation range including voltage and frequency variations.	As per OEM design for BEAS supplied equipment	Bidder to comply with specification requirements.
101.	VI/B	Vol II – E8	3/12	4.03.00	DG set including stack height, acoustics, air emission and fuel oil installation shall meet the requirement given by gazette notifications of Ministry of Environment & Forest time to time , CPCB guidelines, all statutory requirement of Govt. of India and State Pollution Board Guidelines & as updated as on date of bid opening.	Fuel oil for the EDG sets to be provided by Owner / client.	Fuel oil for the EDG sets to be provided by Bidder till completion of O&M period.
102.	VI/B	Vol II – E8	7/12	7.04.00	Diesel generator Control Panel : In addition coupling relays (with diodes) having 24vdc or suitable energizing coil in the control panel shall be provided for remote application for the following : DG Start , DG stop , DG Voltage raise , DG Voltage lower , DG speed raise , DG speed lower , DG auto start	As per OEM design for BEAS supplied equipment	Bidder to comply Technical specification.
103.	VI/B	Vol II – E8	9/12	9.00.00	vi) Separate terminals boxes shall be provided for phase and neutral side of the leads.	As per OEM design.	Bidder to comply Technical specification.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

104.	VI/B	Vol II – E8	9/12	9.00.00	xi) The neutral point shall be brought to DG control panel and shall be connected to 300/110V VT, to be supplied and mounted inside the DG control panel by bidder for earth fault protection.	We understand that NGT needs to be supplied. Please clarify	Technical specification is clear and bidder to comply Technical specification.
105.	VI/B	Vol II – E8	10/12	11.00.00	Type Test: 11.01.01 11.02.0	Will the certificate of type test be valid? Or repeat tests are needed?	Certificates will not be valid. Bidder to comply Type test requirements as per the Technical specification.
106.	VI/B	Vol II – E9	56/21	5.01.00 b)	Operational Requirement: 4-20 milli amps analogue output for use in DDCMIS shall be provided in all breakers. This may provided as analogue output from numerical relay or may be generated by using Suitable CT & Current transducer.	Noted but needs more clarity on DDCMIS and Provision for any soft signal between our Cabinets and DDCMIS.	No soft signal is envisaged between Switchgear panels & DDCMIS.
107.	VI/B	Vol II - E14	4/20	1.01.00	Protection for Main Generator Circuit : 8) Two stage Rotor earth fault protection (64F) based on injection principle. The relay should be capable of monitoring healthiness of injection circuit and raising an alarm in case of open discontinuity in injection circuit.	As per OEM design one stage rotor earth fault relay can be provided through slip rings	Bidder to comply to Technical specification requirement.
108.	VI/B	Vol III	3/52	2.02.03	All Electronic modules of PLC shall have conformal protective coating as per G3 / GX classification in accordance with ISA S-71.04 standard.	Kindly note that the Engine Control Cabinet shall be supplied with OEM standard protective coating.	OEM's Standard and Proven practice shall be acceptable for Gas Engine PLC, subject to Employer's approval on submission of documentary evidence for Standard Practice. However for BOP, Electrical & Common Controls, Bidder to comply the specification requirements.
109.	VI/B	Vol III	3/52	2.02.05	Details of various components and associated systems shall be as given below :	We shall be supplying S7 300 on Engine Control Cabinet with Redundancy for PLCs at Communication, CPU and Power Supply. However no I/O redundancy is provided for Engine Control Cabinet Panel. For Genset Control Cabinet, we shall be supplying S7 400 with Redundancy for PLCs at communication, CPU, Power Supply and I/O. However please note that all sensors (Temperature or pressure) are of simplex type since most of them are mounted on engine/ generator and no modification is feasible for the same	OEM's Standard and Proven practice shall be acceptable for Gas Engine/ Genset PLC and sensors/ instruments, subject to Employer's approval on submission of documentary evidence for Standard Practice. However for BOP, Electrical & Common Controls, Bidder to comply the specification requirements.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

110.	VI/B	Vol III	4/52	2.02.05 I	I) The PLC system should be OPC compliant and shall be provided with necessary hardware and software for successfully establishing dual redundant fiber optic / wireless connectivity using bidirectional OPC communication through OPC DA/UA Protocol	As per OEM design for BEAS supplied cabinets. Noted for BOP and Electro package.	OEM's Standard and Proven practice shall be acceptable for Gas Engine PLC, subject to Employer's approval on submission of documentary evidence for Standard Practice. However for BOP, Electrical & Common Controls, Bidder to comply the specification requirements.
111.	VI/B	Vol III	5/52	2.02.05 m	m) The control system shall have interface and be able to communicate with several open industrial standard communications viz. HART, Profibus / Foundation Field bus, Modbusserial / TCP -IP, ASI , OPC DA / OPC UA	As per OEM design for BEAS supplied cabinets. Noted for BOP and Electro package.	OEM's Standard and Proven practice shall be acceptable for Gas Engine PLC, subject to Employer's approval on submission of documentary evidence for Standard Practice. However for BOP, Electrical & Common Controls, Bidder to comply the specification requirements.
112.	VI/B	Vol III	5/52	2.02.05 n	n) 2 nos. 230VAC UPS Input feeders (Primary & Secondary) shall be provided for each PLC / RIO Panel	As per OEM design. PLC operates on 24V DC and 24 VDC Battery Charger having 3 hours backup.	As per the referred clause 2 Nos. of UPS feeders shall be envisaged for PLC panel by the Bidder. Accordingly for 24 V DC operated PLC, AC/ DC converters shall be envisaged by the Bidder to meet the system requirement.
113.	VI/B	Vol III	8/52	3.05.01	Microprocessor based 2 wire loop powered electronic transmitter with 4-20 mA DC HART output signal shall be provided.	For engine and gas skid HART instruments are not considered. However for all remaining systems, HART instruments can be provided.	Bidder's proposal is acceptable. Instruments for Gas Engines and Gas skid shall be as per standard and proven practice of OEM, subject to Employer's approval.
114.	VI/B	Vol III	10/52	3.07.00	Turbine type Gas flow meter shall be provided for individual Gas Engines. The accuracy of the flow meter shall be 1% at max. gas flow. The Gas Flowmeter shall be calibrated at NABL certified laboratory.	We shall be supplying vortex or coriolis type gas flow meter. Same shall be calibrated as per OEM certified lab.	As per the referred clause, Bidder's standard and proven practice for Gas Flow meter is also acceptable based on documentary evidence.
115.	VI/B	Vol IV	7/37	3.03.07	Water up to EGL to be considered ...	As per clause - Water up to FGL to be considered for design of underground structural elements. However, as per site specific Soil Report attached with specs, there is no ground water encountered from current FGL to about 8m depth (of boring). The site is 4m to 12m above Sea Level. Even if we go down by 4m after levelling, we do not foresee any tank / structure going more than 4-5 meters deep from this level. Then why this requirement? There is no problem in sticking to this requirement of the client - it will only increase the cost of some foundations. But still, better to have clarity about this.	Bidder is requested to adhere to provision of technical specification.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

116.	VI/B	Vol VI	438 of 581 to 521 of 581		QA&I - Chapter	Overall Quality assurance, Inspection and Testing requirements, needs to be reviewed in line of Power Plant application and for Reciprocating Gas engines technology. Standard Quality Assurance and ITP of OEMs shall be followed. This needs to be discussed and agreed mutually.	Bidder to meet the specification requirements. Queries, if any, may be raised specifically.
117.	VI/B	Vol VI	522 of 581 till 543 of 581	522 of 581	Indicative vendor list for Generator and auxiliaries.	The Vendor list provided herewith is mentioned as indicative and is not composite covering all GEG scope of Supply. More over it appears that the alternator manufacturer provided therein are very limited and catering to mostly high capacity turbine side applications. Can we follow our standard vendor list and same list to be captured while bidding and performance certificate for the same to be provided later on after award of contract?	The provided Vendor list is an indicative list only and is not composite covering all GEG scope of Supply. The bidder may propose their standard vendor list for Alternator & Auxiliaries including other elect. items and the same shall be reviewed and accepted based on the Sub-QR/Type Test clearance and / or Vendor works assessment after award of contract. BOI shall be finalised during detail engg. and MQP approval.
118.	VI/B	Vol VI	522 of 581 till 543 of 581	522 of 581	List of sub vendors	many vendors listed i.e. of generator, air bottle „are not from regular vendor base. bidder s may be allowed to offer their standard vendors based on the earlier supplied record basis for the equipment in scope. Wherever the vendors are not defined, bidder shall use the appropriate vendor having track record in particular business segment.	The bidder may propose their standard vendor list for Alternator & Auxiliaries including other elect. items and the same shall be reviewed and accepted based on the Sub-QR/Type Test clearance and / or Vendor works assessment after award of contract. BOI shall be finalised during detail engg. and MQP approval.
119.	VI/B	Vol VII	577/581	5.00.00	The brief scope of works is as indicated below. The details shall be further elaborated by the bidder in the O&M manual to be submitted to NVVN for approval. Items though not specifically mentioned but needed for continuous operation and maintenance of entire power plant to meet the intent of specification, shall be deemed to be included in scope of work of Contractor.	The scope of work for O&M needs to be discussed and mutually agreed. Will the scope be limited to GEG and related auxiliaries or included F&G detection system, Salination plant, elevators, building, hydraulic crane, forklift, trolley, AAQMS, CEMS etc. Also do we need to consider mandatory spares for EDG set?	Bidder to refer Vol VII, Cl. 1.00.00 of Part B. The scope includes Operation and Maintenance of complete Power Plant which is presently covered in bidder's scope of supply, installation and commissioning. Mandatory spare list is attached with Vol III of Part A of technical specification. Bidder to comply.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

SL. NO.	ENQUIRY SPECIFICATION				SPECIFICATION REQUIREMENT	COMMENTS / CLARIFICATIONS	Owner's Reply
	SEC/ PART	SUB SEC.	PAGE NO.	CLAUSE NO.			
120	VI/B	Vol I -M1	3/19	1.02.02.00	Purification System	Requests a continuous oil purification system be supplied. This is not required for the MWM spark ignition engines being proposed for this project. As this is the case should we omit this from our tender?	The referred Oil purification system is external purifier which shall be used for transferring of oil from one tank to another and wet oil sump. However, capacity of engine integral purifier can be as per OEM standard.
121.	-	-	-	-		Our understanding is that the performance guarantees (at ISO) conditions are: 1. Heat rate. 2. Availability guarantee of 90%. 3. Output to be between 45 and 55MW. Please confirm.	Cat-I Guarantees attracting LD are as follows : (i) Net Power Output at Base/Full Load. (ii) Net Heat Rate at LHV basis at 100% of Genset base load. (iii) 90% availability of Plant on yearly basis for a period of 03 (Three) years of O&M contract period.
122	-	-	-	-		There is no reference in the NTPC specifications as to who will be responsible for the provision of UREA during both commissioning or the 3 year O&M period. Normally we would expect UREA provision during the O&M period to be by the Client, as UREA consumption is dependent on fuel quality, engine loadings and number of starts / stops. Please clarify.	It is not clear under what clause of technical specification, Bidder has raised query.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

123	VI/B	Vol III		17.04.01		The client HV specification states that the "33kV Switchboard (each section" shall have two (2) no. of feeder as spare". Please clarify this requirement as we are not sure whether we are just to make provision space wise for these or whether we are to include actual panel enclosures or complete switch panels. If complete switch panels then the specifications do not detail the full requirements for these spare feeders as it does for the other feeders.	Bidder to note that 33kV Switchboard (each section) shall have two (2) no. of feeder as spare. Spare feeders will be complete switchgear panels and rating of these spare panels shall be identical to available feeders in the switchgear. Final rating shall be decided during detail engineering based on the different feeder ratings used in 33 KV switchgear.
124	VI/B	Vol IV	36/37	17.00.00		Radiator has not been shown in layout (Dwg. No. - 6400-999-POC-F-001-R01) in tender document. As per availability of space, radiator would be located on roof of the building. If roof is occupied with radiator, then where to accommodate 40 MW solar panel?	Bidder understanding regarding capacity of solar panel is incorrect. However, refer amendment in this regard
125	VI/B	Vol IV	36/37	17.00.00		Is it mandatory to follow this layout (Dwg. No. - 6400-999-POC-F-001-R01) or can we arrange equipment as per feasibility?	Bidder can develop optimized layout within land acquisition boundary meeting all technical specification and layout requirements. Clause No.- 1.01.00.1 of Chapter-M2/Volume-I/Part-B/Section-VI of Technical Specification to be referred.
126	-	-	-	-		Rainwater harvesting tank design with considering WHRU load on it?	Design of rain water harvesting tank shall be as per specification considering all load coming on it. However, detailing shall be done at detailed engineering stage.
127	-	-	-	-		Shall there be the requirement of Chimney for stand by DG?	Standby DG is not envisaged. In case two DG sets are envisaged as per bidder's design each shall have dedicated chimney.
128	-	-	-	-		Share the AutoCAD format drawing of plant layout (Dwg. No. - 6400-999-POC-F-001-R01).	Auto cad format drawing is not envisaged in tender

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

129	-	-	-	-		Is Topography/Contour Survey Detail drawing in AutoCAD format with spot levels available. If so request to share which is critically required to decide the various internal formation GL's. In technical specifications doc, it is mentioned that site RL varies from +4.00M to +12.00M	Autocad format drawing is not envisaged in tender
130	-	-	-	-		The individual Schematic layout with sections for various building units will be required from NTPC to work out Civil/ Structural Costing of proposal.	The individual Schematic layout with sections for various building units shall be in the scope of bidder
131	-	-	-	-		By referring the Site Plan, We presume the following building unit sizes as follows and developed scheme drawings required to be shared by M/s .NTPC	This is EPC package. Bidder to develop all drawings and same shall be reviewed and approved by owner.
132.	-	-	-	-		Laydown & Preassembly area - Is it just Paved floor area ?	Laydown & Preassembly area shall be paved as per cl. no. 13.05.15 of chapter IVD Civil work volume VI Part -B
133.	-	-	-	-		Guard wall on Sea facing boundary side (Required Length has to be discussed with M/s NTPC)	Retaining wall/Guard wall on Sea facing boundary side has been shown in General Layout Plan with Grid and scale. Bidder may evaluate length from General Layout Plan
134	-	-	-	-		Store Building - 8.00m x 6.50m - Is Shed type okay?	Store building shall be as per technical specification cl. No. 7.03.00 of chapter IVD Civil work volume VI Part-B

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

135	-	-	-	-	FirewaterPumphouse-20.00mx7.00m-EESL shall revise the layout combining Fire Water Pump House and storage tanks -Capacity ofFW storage tank to be decided / confirmed?In layout FWT shown 2 Nos with 10m dia . Plz clarify .	Horizontal centrifugal fire water pumps and jockey pumps along with MS over ground fire water tanks (2x50% & of minimum capacity of 500m3 each) have been envisaged. Size and layout of fire water pump house and storage tank to be decided by bidder confirming to requirement of technical specification.
136	-	-	-	-	LT Switch gear room - 10/00m x 6.00m - May require Auxiliary transformer and DG back up?Fuel for DG ?	Bidder to refer single line diagram drawing (Drg No : 6400-999-POE-J-001) Fuel for DG is in bidder's scope.
137	-	-	-	-	Fire station building- Building Size to be based on Fire tender size/ model / nos ? Pl clarify / confirm .	For details of fire tenders and fire station equipment, Bidder to refer clause 12.02.00, h) Page- 9 & 10 of 69, Volume-III, Part-A and clause 11.00.00, Page-15 of 36, Chapter-M4, Volume-I, Part-B of Technical Specification. Building Size to be decided by bidder confirming to requirement of technical specification.
138	-	-	-	-	Please confirm the requirement of Sewage Treatment Plant & if any ETP ?	Complete Sewerage system including collection & conveyance of sewage either by pumping or by gravity to the sewage treatment plant, disposal and reuse of treated sewage for horticulture etc. and sewage treatment plant (STP) are in bidder's scope. Requirement of ETP– Bidder is requested to refer Point j) of Clause No.11.02.00(Scope of work) of Part-A of Tech Specs.
139	-	-	-	-	To clarify whether shed is required for Valve station , if so size of shed ?	It is not clear under what clause of technical specification, Bidder has raised query.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

140	-	-	-	-		To clarify what is CMB tank and any civil/structural scope is required?	CMB means Central monitoring basin. In Specs CMB Tank of 15M3 capacity is specified. Civil/structural work is required for CMB tank.
141	-	-	-	-		To Clarify / confirm location of Water Cooled Engine Radiators which will come on terrace of Engine Hall?	It is not clear under what clause of technical specification; Bidder has raised query. This shall be discussed during detail engineering.
142	-	-	-	-		Civil / Structural Design / Detailed engineering will be done as per specified codes, but using following software from our end which NTPC needs to confirm. a. Design: Staad Pro. b. Detailing: Auto CAD / G Star cad .	a. Confirmed b. Auto CAD only
143	-	-	-	-		Required perspective views of Buildings shall be complied but any use of 3D modelling software for Arch drawing is not possible. NTPC to confirm this.	Required perspective views of Buildings including Architectural concept floor plans, conceptual interior equipment and furniture arrangement, elevations, cross-sections and perspective view in colour including provision of sufficient natural light for all buildings shall be as per technical specification. Use of 3D modelling software for Arch drawing may not be required

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)

SL. NO.	ENQUIRY SPECIFICATION				SPECIFICATION REQUIREMENT	COMMENTS / CLARIFICATIONS	Owner's Reply
	SEC/ PART	SUB SEC.	PAGE NO.	CLAUSE			
				NO.			
	TS SECTION VI, PART A, VOLUME III (page 6/69)		Page 21/238	11.02.00 SCOPE OF WORK (j)	Effluent treatment system consisting of clarifier/tube settler, oil water separation system etc. to make waste water usable, to the extent possible and to comply with CPCB/SPCB norms for final discharge of remaining water into sea.	Only effluent from the plant is rejected water from RO Plant this can be discharged in to sea.	Bidder to comply to Technical specifications requirements
145.	TS SECTION VI, PART A, VOLUME III (page 9/69)		Page 24/238	h) Fire Tender and Fire station equipment	iii) One no. foam tender with all accessories as per IS: 10460 and its appendices.	Do we need to consider this when the LFO tanks are no more in scope?	Foam tender has been envisaged for use by firefighting personnel in case of fire in oil storage area/oil containing equipment area like COT/DOT area, transformers, etc. Bidder to comply with specification requirements.
146.	TS SECTION VI, PART A, VOLUME III (page 21/69)		Page 36/238	19.02.23	Implementation of Roof Top Rain water harvesting in plant. Min. 300m ³ size Rain water harvesting tank to be provided within the plant.	Fire water tank capacity required 700KL. 2 nos tank considered. Specification calls for an underground rain water harvesting storage of 300KL for filling fire water tank. We propose to increase capacity of each fire water tank to 850KL so as to have storage capacity of 300KL for harvested rain water. For collection of rain water, we propose a 10KL prefabricated tank with pump arrangement and automatic operation for pumping harvested rain water to fire water tank	Bidder is requested to comply the provisions of technical specification
147.	TS SECTION VI, PART A, VOLUME III (page 22/69)		Page 37/238	21.03.04	In course of review of Design Memorandums and Detailed Engineering, it may be essential in the opinion of Employer to obtain certain classified data for review purposes only. The Contractor shall furnish such data to Employer, if required.	Bidder proposes not to share any proprietary information	This will be discussed & finalized during detail engineering stage.
148.	TS SECTION VI, PART A VOLUME III (page 25/69)		Page 40/238	23.02.00 (b)	The Employer reserves the right to buy any or all the mandatory spares parts.	We request the Employer shall buy all the mandatory spares. Parts recommended by the Bidder from the Bidder at least for the Gas Engine and Auxiliaries.	Bidder to comply specification requirement.
149.	TS SECTION VI, PART A VOLUME III (page 25/69)		Page 40/238	23.03.00 c)	This list of recommended spares shall be applicable after the end of O&M contract	We understand that Recommended Spares are spare required for 3-year operation after O&M Period i.e. from Operation Year 4 to Operation Year 6 and this is not included in bid evaluation.	Bidder understanding of applicability of recommended spares after 3 year of O&M contract is correct. Bidder to refer Cl. 23.03.00(b) stating that "Price of recommended spares will not be used for evaluation of the bids."

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)

150.	TS SECTION VI, PART A VOLUME IV (page2/28)		Page 87/239	3.01.00 Note	Bidder shall use Hydrogen/Carbon Relation Ratio under GRI method as per ISO/TR 22302:2014(E) for calculating the Methane number for deciding reference point of correction curve as well as for calculating the Methane number of supplied gas during Performance guarantee test. Bidder shall necessarily submit the calculation of reference methane number as mentioned above along with the bid.		No Query asked related to referred clause.
151.	TS SECTION VI, PART A VOLUME IV (page2/28)		Page 87/240	3.01.00	3.01.01 Guaranteed Performance of each Genset Module shall be at the following reference conditions: Design cooling water temperature shall be decided by the Bidder based on ambient dry bulb temperature and RH conditions specified above.	Please specify the guarantee Ambient Conditions (Temperature and RH) it is a must. For providing Guarantee in case of Gas Engines Ambient conditions play a very vital role comparable to Fuel Composition. No conditions mentioned above	Bidder to comply specification requirement.
152.	TS SECTION VI, PART A VOLUME IV (page5/28)		Page 89/237	3.04.01	Performance test of each Engine (output & Heat rate) shall be calculated during PG tests at Site. During evaluation of Performance Guarantee Test results, corrections shall be applicable only for following: a. Methane Number RLNG fuel b. Power Factor c. Frequency	Bidder requests NVVN to kindly specify the Ambient Conditions like last tender and also consider Ambient de rating graph for corrections. Methane number , Fuel LHV , Gas Pressure , Ambient Temperature and Relative Humidity as well as Altitude all of these affect the performance of gas engines.	Bidder to refer Cl. No. 4.03.01 of Vol IV, Part A of technical specification for ambient conditions. Bidder to comply specification requirement.
153.	TS SECTION VI, PART A VOLUME IV (page5/28)		Page 89/238	4.01.04 (ii)	It shall be possible to start and synchronize Genset units at any grid frequency within the frequency band of 47.5 - 51.5 Hz without any restriction.	There would be variation in response due to frequency variation. The Graph will be shared as part of Technical Offer.	Bidder to clarify more on "response". Bidder may submit the graph. However Technical specification requirement has to be complied.
154.	TS SECTION VI, PART A VOLUME IV (page 9/28)		Page 93/238	6.02.03	NOx Control equipment shall be designed to achieve the above specified NOx level in all ambient conditions specified.	Bidder requests NVVN to let bidder decide the solution for Nox control.	Bidder has to meet the specification requirement of NOx control as per Cl. 1.03.01(i) of Vol V, Part A
155.	TS SECTION VI, PART A VOLUME IV (page17/28)		Page 101/238	10.02.00.2 (a& b)	a) Inside Temperature shall be maximum 6 deg. C above the design ambient temperature during summer for mechanically ventilated Engine Hall. b) Inside Temperature shall be maximum 3 deg. C above the design ambient temperature during summer for mechanically ventilated other areas.	Bidder proposes to maintain engine hall temperature as 8 to 10 degrees above ambient temperature. Request customer to allow the same since the engine hall is generally unmanned. It will not only be economical but also prudent considering the space constraint at site.	Bidder to comply with specification requirements.
156.	TS SECTION VI, PART A VOLUME IV (page22/28)		Page 106/238	15.08.02 (a)	The Bidder or its Sub-vendor should have manufactured and supplied the solar PV modules of cumulative installed capacity of 1MWp or above using any rating of modules and any source of indigenous or imported PV cells in any one financial year.	Bidder proposes NVVN to remove the requirement of 'manufacturer' from qualification of solar PV Vendor as it would be difficult to get the same for 40kWp power requirement.	As this clause is for Module manufacturer, it is relevant for any small capacities also. Bidder to comply with specifications
157.	TS SECTION VI, PART A VOLUME V (page 5 /9)		Page 117/238	1.01.02 1.04.03	'Demonstration Guarantees' or 'Category III Guarantees'	Bidder proposes to remove the complete Category III guarantees since these tests are not required for a plant of this capacity.	Bidder to comply specification requirement.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)

158.	TS SECTION VI, PART A VOLUME V (page 3 /9)		Page 115/238	1.02.03 (c)	GUARANTEES ATTRACTING LIQUIDATED DAMAGES (CATEGORY I) Net Genset heat rate at 100% of Genset base load within (+) 2% of the Guaranteed Net Genset Heat Rate at 100% of the base load (with each specified fuels).	Bidder Proposes following for the performance guarantees as c) Net Genset Heat Rate at 100% of Genset base load within (+) 2.5 % of the Guaranteed Gross Genset Heat Rate at 100% of the base load (with each specified fuels).	Clause content referred by Bidder is not correct. However, Bidder to comply specification requirement.
159.	TS SECTION VI, PART A VOLUME-V PERFORMANCE GUARANTEES (page 4/9)		Page 116/238	1.02.04.(b)	'Availability' plant shall be calculated as follows:	Kindly Note the following: 1. For Purpose of Calculation "P" Net Power Generation of genset, the accepted value of "P" post PG test Value after LD application if any shall be used. 2. LDs for Annual Availability shall be calculated at end of each Operating year.	1. Specification requirement is clear. "P" shall be the quoted value. 2. Bidder to refer Cl. No. 3.01.00 of Vol V, Part A. LD will be levied at the end of every year for 03 years. Specification requirement is clear in this regard.
160.	TS SECTION VI, PART A VOLUME-V PERFORMANCE GUARANTEES (page 4/9)		Page 116/238	1.03.01 (i)	NOx emission level of less than 80 ppm (dry volume basis corresponding to 15% excess oxygen in Engine exhaust) while operating at 100%, 90%, 80%, 70%, 60% & 50% of Base Load Output.	Bidder requests guarantees be only at 100% loading and only 1 part load.	Bidder to comply specification requirement.
161.	TS SECTION VI, PART A VOLUME-V PERFORMANCE GUARANTEES (page 4/9)		Page 116/238	1.03.01 (ii)	Noise level (near field and far field) of Engines, Generators/Alternators and including all the auxiliaries and their system at 100% and 80% of the baseload of Gensets as per the applicable Norms.	Bidder requests guarantees be only at 100% loading. 80% load can be measured but only for reference not as guarantees. Request NVVN to kindly share the referred Norms or preferably the exact value.	Bidder to comply specification requirement regarding guarantees. Regarding Norms please refer amendment.
162.	TS SECTION VI, PART A VOLUME-V PERFORMANCE GUARANTEES (page 9/9)		Page 121/238	3.01.00 (i)	GUARANTEES ATTRACTING LIQUIDATED DAMAGES (CATEGORY I) Contractor's aggregate liability to pay liquidated damages for failure to attain the functional guarantee shall not exceed twenty five percent (25%) of the Contract Price.	Bidder proposes overall performance shortfall LD cap to be limited to 15% of the contract value	Bidder to comply specification requirement.
163.	TS SECTION VI, PART A VOLUME-VI GENERAL TECHNICAL REQUIREMENTS (page 5/71)		Page 126/238	5.06.00	Two (2) English language copies of all national and international codes and/or standards used in the design of the plant and equipment shall be provided by the Contractor to the Employer within two (2) weeks from the date of the Notification of Award.	Submission of standards are not possible.	Bidder to comply specification requirement.
164.	TS SECTION VI, PART A VOLUME-VI GENERAL TECHNICAL REQUIREMENTS (page 8/71)		Page 129/238	B) DETAILED ENGINEERING DOCUMENTS	xvi) Instrument schedule, measuring point list, I/O list, Interconnection & wiring diagram, functional write-ups, installation drawings for field mounted instruments, logic diagrams, control schematics, wiring and tubing diagrams of panels and enclosures etc. Drawings for open loop and close loop controls (both hardware and software). Motor list and valve schedule including type of actuator etc.	Bidder propose deviation as information sought are proprietary. However bidder proposes to share limited information which shall be discussed during detailed Engg.	Bidder to comply specification requirement.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)

165.	TS SECTION VI, PART A VOLUME-VI GENERAL TECHNICAL REQUIREMENTS (page 8/71)		Page 129/238	B) DETAILED ENGINEERING DOCUMENTS	xviii) Sequence and protection interlock schemes	Bidderproposestodiscussuchrequirementduringdetailed engg.	Bidder to comply specification requirement
166.	TS SECTION VI, PART A VOLUME-VI GENERAL TECHNICAL REQUIREMENTS (page 14/71)		Page 135/238	8.03.04 a) (i)	The soft copies shall be uploaded by the vendors in C- folders, a web-based system of NVVN/NTPCERP, for which a username and password will be allotted to the new vendor by NVVN.	We will upload only PDF copy	This shall be as per engineering coordination procedure finalized with successful bidder.
167.	TS SECTION VI, PART A VOLUME-VI GENERAL TECHNICAL REQUIREMENTS (page 15/71)		Page 136/238	8.03.04 i)	i) Drawings shall include all installations and detailed piping layout drawings. Layout drawings for all piping of 65mm otherwise after their erection as per actual physical condition for the entire scope of work of this package.	Bidder will submit the drawing list mentioning the drawings for employers approval/information.	The Master drawing list will be finalized with successful bidder.
168.	TS SECTION VI, PART A VOLUME-VI GENERAL TECHNICAL REQUIREMENTS (page 16/71)		Page 137/238	8.03.05	e-learning packages shall be supplied for the equipment / system for the following Engine- Generator/Alternator set & auxiliaries along with associated electrical and C&I system.	E Learning module will be provided as per OEM by bidder. There may be some differences in the pattern and formats.	Bidder to comply specification requirement.
169.	TS SECTION VI, PART A VOLUME-VI GENERAL TECHNICAL REQUIREMENTS (page 29/71)		Page 150/238	21.24.00	Environmental Stress Screening	Bidder inform that the control panel are installed in the control room which has Air conditioned environment. The Control panels installed outside control room are suitable to withstand the temperatures mentioned in the tender. Hence environment screening is not envisaged by the bidder.	This requirement is not meant for actual installation condition . Bidder to comply the specification requirement.
170.	TS SECTION VI, PART A VOLUME-VI GENERAL TECHNICAL REQUIREMENTS (page 49/71)		Page 170/238		Prefab standards to conform	The Pre - Engineered building for the Engine hall including roof and wall panels will be designed and fabricated as per European code satisfying local site conditions.	Bidder is requested to comply the provisions of technical specification. PL refer cl.no. 13.05.00 chapter IVD Civil work section VI Part B of Technical specification.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)

171.	TS SECTION VI, PART-B VOLUME-I CHAPTER – M1 (page 5/19)		Page 7/581	1.02.02.00 Purification System		Bidder doesn't envisage the need for Lube Oil purification system.	The referred Oil purification system is external purifier which shall be used for transferring of oil from one tank to another and wet oil sump. Hence, the capacity mentioned is in order. However capacity of engine integral purifier (If any) can be as per OEM standard.
172.	TS SECTION VI, PART-B VOLUME-I CHAPTER – M1 (page 5/19)		Page 9/581	1.02.02.05 a	Oil return lines from bearings are fitted with sight glass (as per OEM practice).	As per OEM standard no sight glass are fitted on oil return line of bearing. We understand OEM standard will be acceptable.	Sight glass to be fitted in oil return line.
173.	TS SECTION VI, PART-B VOLUME-I CHAPTER – M4 (page 2/36)		Page 38/581	2.00.00 HYDRANT SYSTEM	HSD unloading area under the scope of the Bidder. fuel oil station rack, etc ii) DG set oil tanks.	Mention of HSD and liquid fuel related systems to be removed from Tender	Refer Amendment for non- applicability of HSD unloading area. Bidder to comply with specification requirements regarding MVW spray protection system for DG set oil tanks
174.	TS SECTION VI, PART-B VOLUME-I CHAPTER – M4 (page 2/36)		Page 38/581	2.00.00 HYDRANT SYSTEM	i) All cable galleries/ cable vault/ cable spreader room in main plant including and switchyard building (if applicable)	Bidder does not envisage the need for MVW system	Bidder to comply with specification requirements.
175.	TS SECTION VI, PART-B VOLUME-I CHAPTER – M4 (page 14/36)		Page 50/581	8.01.00 (i)	i) Stainless Steel to ASTM A312, Gr. 316L welded for sizes 65 NB and above. Stainless steel to ASTM A312, Gr. 316L sch. 40 seamless for sizes 50 NB and below.	Bidder proposes to use carbon steel for piping.	Bidder to comply with specification requirements.
176.	TS SECTION VI, PART-B VOLUME-I CHAPTER – M4 (page 23/36)		Page 59/581	3.6 FOAM TANK:		Is Foam tank required now that the LFO system is no more in scope?	Foam tender has been envisaged for use by fire fighting personnel in case of fire in oil storage area/oil containing equipment area like COT/DOT area transformers, etc. Bidder to comply with specification requirements.
177.	TS SECTION VI, PART-B VOLUME-II CHAPTER-II-E14 (page 14/20)		Page 268/581	5.00.00 (iii)	Thickness of panel sides shall be 2mm for Cold Rolled Sheet Steel, 2.5mm for Hot Rolled Sheet Steel.	Bidder proposes to consider OEM standard design for control panels	Bidder comply with specification requirements.
178.	TS SECTION VI, PART-B VOLUME-II CHAPTER-II-E14 (page 14/20)		Page 268/581	5.00.00 (v)	Panels shall have a lockable front toughened glass door and a swing frame/ fixed rack. Panels shall facilitate direct access to any component mounted inside and shall have at least 20% free space for future expansion.	Bidder proposes to consider OEM standard design for control panels	Bidder comply with specification requirements.
179.	TS SECTION VI, PART-B VOLUME-II CHAPTER-II-E14 (page 15/20)		Page 269/581	7.00.00 (iii)	Wires shall be vermin proof	Adding vermin proof chemicals are not allowed in EU. Bidder proposes proper sealing of the panel for avoiding rodent entry.	Bidder comply with specification requirements.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)

180.	TS SECTION VI, PART-B VOLUME-III CHAPTER-III-C (page 4/52)		Page 294/581	2.02.05 (k)	HMI network between controllers and HMI devices shall be a minimum 100 Mbps redundant Ethernet control network (based on TCP/IP) to ensure high availability.	Bidder proposes to use Ring topology with 100 Mbps	Bidder's proposal is acceptable.
181.	TS SECTION VI, PART-B VOLUME-III CHAPTER-III-C (page 5/52)		Page 295/581	2.02.05 (n)	2 nos. 230V AC UPS input feeders (primary & secondary) shall be provided for each PLC / RIO panel.	Bidder proposes to consider redundant 110V DC supply as control supply as per power plant requirement.	As per the referred clause 2 Nos. of UPS feeders shall be envisaged for PLC panel by the Bidder. Accordingly for 110V DC control supply, AC/DC converters shall be envisaged by the Bidder to meet the system requirement.
182.	TS SECTION VI, PART-B VOLUME-III CHAPTER-III-C (page 11/52)		Page 301/581	4.00.00	CONTINUOUS EMISSION MONITORING SYSTEM	The specification mentioned herein is not required for a plant of this capacity. NVVN to reconsider requirement of NMHC analyser.	Bidder to comply specification requirements.
183.	TS SECTION VI, PART-B VOLUME-IV CHAPTER-IVD (page 2/37)		Page 344/581	1.01.00	The Bidder shall do all works related to site/vegetative cover clearance including grading and finishing.	Levelling/grading of the whole site will be done as per the approved Master layout site and approved levelling drawing. Actual levels of the whole site will be taken jointly with the employer at the beginning of the project and actual excavation/back filling quantity shall be recorded.	Bidder's understanding is correct. However, this is not an item rate contract but an EPC contract and bidder shall do all the works including site levelling as per specification and provisions of contract.
184.	TS SECTION VI, PART-B VOLUME-IV CHAPTER-IVD (page 3/37)		Page 345/581	2.01.02	f) Structural analysis, design calculations and drawings of substructure and superstructures for all buildings and other Auxiliary Buildings etc., structures, facilities, and systems. g) Analysis, design calculations for pipe/cable rack structures/pedestals etc. h) Analysis, design calculations and drawings for all services like roads, culverts, bridges, road crossings, drainage pump houses (if required), drainage/drains, sewerage/sewers, sewage pump house, water supply, water tank, cable trestles, trenches, ducts, etc. i) Design calculations including dynamic analysis and drawings for all foundations subjected to dynamic loads	Bidder suggests to submit design basis document covering all aspects like loads, foundations etc at the beginning of the project and all the buildings/structures will be designed as per that this will save approval time.	Design basis document shall be submitted by the Bidder at the beginning of the project. However, approval time shall be as per provisions of the Bid Document. Please refer cl.no. 8.05.03 of GTR Volume, VI, Part-A
185.	TS SECTION VI, PART-B VOLUME-IV CHAPTER-IVD (page 3/37)		Page 345/581	2.01.02 (n)	Shop drawings/ fabrication drawings of all structural steel works (for information only) along with design calculations for important joints/ connections.	Since shop drawings are normally made by sub contractors these can only be submitted after the installation works.	Since, fabrication cannot be done without having Shop/Fabrication drawings, therefore, Bidder is requested to comply with the provisions of technical specification in this regard.
186.	TS SECTION VI, PART-B VOLUME-IV CHAPTER-IVD (page 5/37)		Page 347/581	3.01.06	Plinth level of all buildings shall be kept at least 500 mm above the finished grade/formation level.	Suggested Plinth level is 300mm since the soil is rocky. The storm water will be drained through gravity and through the grades	Bidder is requested to comply the provisions of technical specification
187.	TS SECTION VI, PART-B VOLUME-IV CHAPTER-IVD (page 9/37)		Page 351/581	4.01.02	The scheme for geotechnical investigation shall be as given at Clause 1.07.00 and shall be approved by Owner before execution.	Delay in approval from Owner needs to be discussed and clarified suitably.	This shall be as per engineering coordination procedure finalised with successful bidder

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)

188.	TS SECTION VI, PART-B VOLUME-IV CHAPTER-IVD (page 11/37)		Page 354/581	4.03.00	Contractor shall carry out chemical analysis during detailed geotechnical investigation and required treatment shall be provided accordingly.	Chemical tests will be carried out during confirmatory soil investigation but if any adverse condition is observed the cost incurred to address that should be reimbursed to wardsila as per mutual agreement.	Detailed geotechnical investigation work is in the scope of bidder. Contractor has to carry out chemical analysis during detailed geotechnical investigation and required treatment shall be provided accordingly. However, minimum treatment to the foundation shall be provided as per Technical Specification. Further, No extra claim shall be entertained on account of same.
189.	TS SECTION VI, PART-B VOLUME-IV CHAPTER-IVD (page 17/37)		Page 359/581	7.03.00	O&M Store- Permanent store shall be of suitable size and this will be of mixed construction with structural steel roof truss/purlins supported over RCC columns.	Already part of the utility block building.	Bidder is requested to comply the provisions of technical specification
190.	TS SECTION VI, PART-B VOLUME-IV CHAPTER-IVD (page 17/37)		Page 359/581	7.04.00	Gate complex: Gate complex shall be an RCC structure of suitable size. This shall include security office, Safety Center and Gate Canopy. Minimum size shall be 40sqm.	PEB steel structure with sandwich wall and roof panel	Bidder is requested to comply the provisions of technical specification
191.	TS SECTION VI, PART-B VOLUME-IV CHAPTER-IVD (page 20/37)		Page 262/581	10.03.00	RCC drains located within and along both sides of peripheral roads of the main plant shall be covered with perforated precast RCC slabs of minimum 100 mm thickness with provision of openable galvanized steel grating covers at about 4.0 metre intervals.	Bidder proposes to consider one side drain as the space is limited	Bidder is requested to comply the provisions of technical specification
192.	TS SECTION VI, PART-B VOLUME-IV CHAPTER-IVD (page 21/37)		Page 363/581	11.01.00	The roads shall be (6.5 metre wide) with 5.5 metre wide concrete pavement and 0.5 metre wide raised shoulders on both sides of the roads and drain of 0.5 m on both side.	Due to space constrain, Bidder suggests to keep shoulder to one side.	Bidder is requested to comply the provisions of technical specification
193.	TS SECTION VI, PART-B VOLUME-IV CHAPTER-IVD (page 23/37)		Page 365/581	12.18.01 (c)	The minimum Grade of concrete for foundation of Engine shall be M35.	Bidder suggests employer to consider M30 as per actual requirement of project.	Bidder is requested to comply the provisions of technical specification
194.	TS SECTION VI, PART-B VOLUME-IV CHAPTER-IVD (page 24/37)		Page 366/581	13.02.01	Sand Cast Iron pipes with lead joints conforming to IS: 1729 shall be used for sanitary works above ground level.	Bidder requests employer to consider sanitary pipes as PVC 6kg/cm ² instead of cast iron pipe	Bidder is requested to comply the provisions of technical specification
195.	TS SECTION VI, PART-B VOLUME-IV CHAPTER-IVD (page 25/37)		Page 367/581	13.03.00	FLOORING	Considering the requirements , Bidder proposes to provide Engine hall floor with Epoxy painted Office and toilet floor are vitrified / ceramic tiles.	Bidder is requested to comply the provisions of technical specification.
196.	TS SECTION VI, PART-B VOLUME-IV CHAPTER-IVD (page 25/37)		Page 367/581	13.03.02	Sunken RCC slab shall be provided in false flooring area and all toilet areas so as to keep the finished floor level of these areas 25 mm below as that of the surrounding area. For toilet area, sunken slabs shall be made water tight by suitable water proofing treatment.	Bidder proposes to provide pipe penetration in floor slab for sanitary connection in place of sunken slab	Bidder is requested to comply the provisions of technical specification

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)

197.	TS SECTION VI, PART-B VOLUME-IV CHAPTER-IVD (page 25/37)		Page 367/581	13.03.03	Metallic hardenertopping—with ordinary grey cement - 12 mm thick (in situ) or finishing the concrete / mortar surfaces topping with neat cement slurry(with ordinary grey cement)	Integrated floor finishing and epoxy floor painting will be done.	Bidder is requested to comply the provisions of technical specification.
198.	TS SECTION VI, PART-B VOLUME-IV		Page 402/581		Appendix III Site Layout	Request NVVN to provide a readable copy of General Layout Plan(6400-999-POC-F-001)alongwiththecontourlines.	General layout Plan is already provided in tender at page 380 of 581 Part -B For Topographical survey data, refer Tender Drawing No. CCPL/1178/2 Rev-1 at page no.420 of 581 Part-B
199.	TS SECTION VI, PART-B VOLUME –V CHAPTER – V-RS ROOFTOP SOLAR Page (2/12)		Page 422/581	1.1	Determination of optimal grid connected roof-top Solar PV power plants capacity on the Buildings of Power Plant.	Earlier the capacity was fixed at 40 kWp . As per the clause referred alongside we understand that this time bidder has to declare the possible capacity. Will there be any advantage for more kWp declared?	As per the present tender documents, the capacity will be decided as per available rooftop space and relevant tender document conditions. No advantage for the bidder who declares more capacity is given as per tender.
200.	TECHNICAL SPECIFICATIONS SECTION VI, PART A VOLUME III		25 of 69	23.02.00 (b)	The Employer reserves the right to buy any or all the mandatory spares parts.	We request Employer to redraft the clause as follows; The Employer shall buy all the mandatory spares Parts recommended by the Bidder from the Bidder at least for the Gas Engine and Auxiliaries.	Bidder to comply specification requirement.
201.	TECHNICAL SPECIFICATIONS SECTION VI, PART A VOLUME III		30 of 69	List of mandatory spares	In List of Mandatory parts there is reference to “Sets”- Like Cylinder Head – 1 Set & Piston – 1 set	Does one 1 set mean – quantity for 1 engine i.e. example for an 16 cylinder engine. We will have to supply 16 no’s cylinder head & 16 nos of piston? Is NVVN looking to buy such quantities of Mandatory spares	Bidder to refer Specification Cl. No. 23.02.00 (a) for definition of “sets”.
202.	TECHNICAL SPECIFICATIONS SECTION VI, PART A VOLUME III		25 of 69	23.03.00 c)	This list of recommended spares shall be applicable after the end of O&M contract period. During O&M contract period bidder to arrange all spares etc. at their own cost.	We understand that Recommended Spares are spare required for 3-year operation after O&M Period .i.e. from Operation Year 4 to Operation Year 6 and this is not included in bid evaluation	Bidder understanding of applicability of recommended spares after 3 year of O&M contract is correct. Bidder to refer Cl. 23.03.00(b) stating that “Price of recommended spares will not be used for evaluation of the bids.”
203.	TECHNICAL SPECIFICATIONS SECTION VI, PART A VOLUME-V PERFORMANCE GUARANTEES		4 of 9	1.02.04.(b)	‘Availability’ of each Genset:	Note to be added for clarification: 1. For Purpose of Calculation "P" Net Power Generation of genset, the accepted value of "P" post PG test Value after LD application if any shall be used. 2. LDs for Annual Availability shall be calculated at end of each Operating year.	1. Specification requirement is clear. “P” shall be the quoted value. 2. Bidder to refer Cl. No. 3.01.00 of Vol V, Part A. LD will be levied at the end of every year for 03 years. Specification requirement is clear in this regard.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)

204.	"TECHNICAL SPECIFICATIONS SECTION VI, PART-B - VOLUME-VII CHAPTER-VII-O&M"		2 OF 6"	3.00.00	The Contractor shall be responsible for the complete Operation and Maintenance of the entire power plant during the O&M period including disposal of effluents and other oily and non-oily wastes generated during O&M period inside plant i.e. all equipment supplied by Contractor which is erected and commissioned as per the scope of contract. However, contractor shall have no right to dispose/sell scraps generated during the O & M period, same to be done only after prior approval of the owner	We request Employer to redraft the clause as follows; The Contractor shall be responsible for the complete Operation and Maintenance of the entire power plant during the O&M period including disposal of effluents and other oily and non-oily wastes generated during O&M period inside plant i.e. all equipment supplied by Contractor which is erected and commissioned as per the scope of contract. Contractor shall collect the waste generated in designated areas within the battery limits of Facility and further disposal shall be in scope of Employer. The Employer shall arrange for wastewater and sewage disposal services and dispose of any and all waste, sludge and Hazardous Materials in accordance with all Governmental Rules and Authorisations Contractor shall have no right to dispose/sell scraps generated during the O&M period, same to be done only after prior approval of the owner."	Bidder is requested to comply to technical specifications requirements. in line with Clause Nos. 1.06.01 of Volume-II of Tech Specs, Section-VI, Part-A and 11.02.00 a) & j) of Volume-III of Tech Specs, Section-VI, Part-A" Disposal of waste generated during erection shall be as per relevant clauses of Erection condition of contract of Part A or elsewhere in the contract. Regarding sewage disposal, please refer Cl. No. 19.02.14 of Vol III, Part A and clause 9.0 in Vol IV of Part B.
205.	TECHNICAL SPECIFICATIONS SECTION VI, PART-B - VOLUME-VII CHAPTER-VII-O&M"		2 OF 6"	4.00.00	Owner's scope shall be limited to supply of Fuel Gas only. Further, gas will be supplied at designated point within the plant boundary.	We request Employer to redraft as follows; Owner's scope shall be limited to supply of Fuel Gas and water. Further, Water, Fuel gas will be supplied at designated point within the plant boundary.	Bidder to comply specification requirement.
206.	TECHNICAL SPECIFICATIONS SECTION VI, PART-B - VOLUME-VII CHAPTER-VII-O&M"		3 OF 6"	5.00.00 (f)	Supply of all type of maintenance spares, consumables and fixing /application of the same. Contractor has to maintain all spares and including critical spares in case of any major breakdown/annual overhaul and consumables required for the entire period of 03 years based on his experience.	The Employer shall buy all the mandatory spares Parts recommended by the Bidder from the Bidder at least for the Gas Engine and Auxiliaries. For purpose of clarity we assume engine lube oil is a consumable and which will also be bidder scope.	Bidder to comply specification. All consumables are in bidder's scope.
207.	TECHNICAL SPECIFICATIONS SECTION VI, PART-B - VOLUME-VII CHAPTER-VII-O&M"		5 OF 6"	5.00.00 (y)	Replacement of equipment/spare parts/ updation of software being phased out or not being supported by OEM's is also included in bidder's scope	We request Employer to consider of Replacement of equipment/spare parts shall be covered as per EPC Warranty Clause in case of any defect. Any Updating of software being phased out or not being supported by OEM shall be updated by Contract as Change order.	Any upgradation in phased out software/ equipment/spare part is in bidder scope for complete O&M period. No separate order will be placed for the same. Specification requirement is clear.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)

208.				5.01.00-c:	Approval of System	Contractor shall be responsible for taking approval of fire alarm system only from Local Fire Authorities. Deptt. Of atomic energy, CBRI or CMRS do not have authority to inspect or approve a fire alarm system installation.	Bidder to comply specification requirement.
209.				5.03.07	Test Certificate based on height	Bidder shall design the system as per recommendations of NFPA 72, IS:2189 along with the rated values given by OEM of the fire alarm system. No specific test certificate based on site condition can be provided by OEM/ Contractor. Contractor will prepare the drawings as per codes and get the approval based on recommendations given in the codes.	Bidder's understanding is correct.
210.				5.05.00	LHS Cable Temperature	All manufacturers have temperature rating of either 68 deg C or 78 deg C. 70 deg C as a set point for alarm in case of Digital LHS cable is non standard and not available.	Bidder to comply specification requirement.
211.				5.08.01	Communication between panels and PLC	Fire alarm control panels shall be networked and will communicate with each other and the repeater panel on the fire alarm network. But this FAS panel can communicate with third party PLC panel only through open protocols like Modbus or Bacnet where FACP can give data to PLC/ SCADA. FACP cannot receive any data from third party device.	Bidder to comply specification requirement.
212.				5.08.01	Controlling of Pumps from PLC workstation	Fire Pumps are operated at various set points through pressure switches controlled by a Relay based or PLC based MCC panel. It is not recommended to operate the fire pumps from remote location on manual mode.	Bidder to comply specification requirement.
213.				5.08.03	Networking	Fire alarm system control panels will be networked and will have 2 way communication with each other. But PLC based MCC panel for controlling fire pumps are independent and will not communicate in a 2 way fashion with the fire alarm system. We can take status of pumps in fire alarm system through monitor modules.	Bidder to comply specification requirement.
214.				5.10.01 cl.7	Annunciation Window	There is no separate annunciation window possible in the fire alarm system panel. The panel has onboard LED's for various signals like Power ON, Power Fail, Battery On, etc. Changeover from main to battery supply will be seamless as panel will have inbuilt battery charger with redundancy.	Bidder's understanding is correct.
215.				5.10.01 cl.10	Annunciations on Panel	Fire alarm panel LCD display which shows the type of pre alarm, maintenance alerts and alarm. Apart from the display there are LED's indicating various conditions on the panel and there is a Piezoelectric buzzer on board which will start in case of trouble and alarm. Field hooters will be activated only in case of alarm but on the panel there cannot be 2 tones for Fault Alarm and Fire Alarm.	Bidder to comply specification requirement.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)

216.				5.10.02 cl. iv	Self-adjustment feature	All smoke detectors shall have drift compensation feature as per requirements of NFPA and specifics shall be as per the OEM who has taken approval from UL / FM for the said product.	Bidder to comply specification requirement.
217.				5.10.02 cl. Viii	History reporting Video display terminal	Panel has on board LCD display which will display all alarms with history logs.	Bidder's understanding is correct.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

SL. NO.	ENQUIRY SPECIFICATION				SPECIFICATION REQUIRE-MENT	COMMENTS / CLARIFICATIONS	Owner's Reply
	SEC/ PART	SUB SEC.	PAGE NO.	CLAUSE NO.			
218.	VI/A	Vol I	2/3	1.01.00 iv)	Compliance with statutory requirements and obtaining clearances from statutory authorities, wherever required.	We shall be submitting the data to the extent possible as required for seeking approval from statutory body applicable to us and per scope of supply demarcation. Obtaining approvals and clearances from statutory authorities by Client / Owner.	Provisions of Bid Documents shall Prevail.
219.	VI/A	Vol IV	9/28	6.02.01	The Guaranteed NOx level (on dry volume basis corresponding to 15% excess oxygen in flue gas) for each Engine shall be as follows: RLNG - less than 80 ppm	This needs to be discussed, as per Emission standard mentioned in MOEF dated 22.12.1998 for Gas / Naphtha based power plants mentions the NOx level to be less than 100 ppm @ 15% O2. Also request to clarify if environmental clearance for NOx Emission level defined as 80 ppm @ 15 % O2, has been obtained by client / owner.	Provisions of Bid Documents and its amendments shall Prevail. Environmental Clearance for the said Project shall be taken by the NVVN and its in progress.
220.	VI/B	Vol I - M1	8 of 19	1.02.08	Statutory Approval	We shall be submitting the data to the extent possible as required for seeking approval from statutory body applicable to us and per scope of supply demarcation. Obtaining approvals and clearances from statutory authorities by Client / Owner.	Provisions of Bid Documents shall Prevail.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

221	Section VI/A	Vol I	Page 2 of 3	1.01.0 (iv)	Compliance with statutory requirements and obtaining clearances from statutory authorities, wherever required;	Bidder requests Employer to take responsibility of the Approvals and Clearances to be taken in the name of the Employer. This applies to reference of Statutory Approvals here and anywhere else in the tender document.	Environment Clearance, CRZ Clearance and Wild Life Clearance shall be taken by the Employer. Remaining Clearances and Approvals shall be sought by the Bidders
222	Section VI/A	Vol III	Page 25 of 69	23.02.00 (f)	Supplied mandatory spares shall be under the ownership of client/owner and same shall not be taken into account by the contractor for the scope of O&M contract.	We request owner to allow use of mandatory spare during O&M period by Bidder for attending any unplanned maintenance. The bidder will replenish the same at free of cost.	Bidder to comply with the provisions of Bid Document.
223	Section VI/B	VOL-VII	3 of 6	5.00.00 (f)	Ensuring Safety and protection of the plant by deputing sufficient security personnel. High order of safety practices and standard engineering methods shall be adopted during O&M. All safety tools and personal protection equipment are in the scope of bidder.	1. Will the CISF will be deployed by NVVN for Plant boundary security? 2. Kindly provide scope split on security between the Owner & Operator?	The security of the Plant shall be ensured by the bidder. The Provisions of Bid Documents are Clear and Prevail.
224	Section VI/B	VOL-VII	5 of 6	5.00.00 (z)	Contractor shall be responsible to carry out all tests and works as required by statutory regulations in effect as on date of Techno-Commercial bid opening during O&M period.	We request Employer to redraft as follows; Contractor shall be responsible to carry out all tests and works as required by statutory regulations in effect as on date of Techno-Commercial bid opening during O&M period. However, obtaining the licenses and all coordination with statutory bodies Governmental & Non-Governmental shall be done by the Employer.	Bidder to comply with the provisions of Bid Document.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

225	Section VI/B	Vol-VII	3 of 6	5.00.00 (b)	Carrying out necessary Preventive maintenance and Breakdown maintenance, overhauls, furnishing technical assistance from experts & arranging visit of O&M experts to site from time to time (as & when required and to be discussed mutually by Contractor & Owner) for ensuring smooth operation and maintenance of the plant. Also carrying out maintenance during annual overhauling /capital overhaul of the units.	The bidder shall be responsible for Breakdown Maintenance of the Facility, excluding any Unplanned Maintenance, breakdown, theft, loss, defect, destruction, damage or failure in the Facility or in any part thereof due to or arising out of following reasons; a. Force Majeure; b. acts or omissions of the Employer under this Agreement or any matter for which the Employer is responsible; c. acts or omissions by Third Parties; Employer shall be responsible for all cost incurred due to above reasons.	Provisions of Bid Documents are clear and shall prevail.
226	-	-	-	-	-	By given site plan or Plot Plan shared, We understood the site is very close to Sea . Please confirm whether the proposed site meets the norms of CRZ act. Even Site Plan has to be modified with required setbacks as per local norms which is presently not captured .	The Project Site attracts ICRZ-III. NVVN shall seek CRZ Clearance.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

227.	-	-	-	-	-	Which is the document required as a proof for financial Criteria, either balance sheet or CA certificate?	Balance sheet will be considered. However In cases where audited results for the last financial year as on the date of Techno Commercial bid opening are not available, the financial results certified by a practicing Chartered Accountant shall be considered acceptable. In case, Bidder is not able to submit the Certificate from a practicing Chartered Accountant certifying its financial parameters, the audited results of three consecutive financial years preceding the last financial year shall be considered for evaluating the financial parameters. Further, a Certificate would be required from the CEO/CFO as per the format enclosed in the bidding documents stating that the financial results of the Company are under audit as on the date of Techno- commercial bid opening and the Certificate from the practicing Chartered Accountant certifying the financial parameters is not available.
------	---	---	---	---	---	---	--

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

228	Sec- tion VI/A	Vol-V	24 of 69	21.09.0 2	The Contractor shall be responsible for making all necessary arrangements required for conductance of specified tests and accordingly the cost associated with the specified tests shall be included in the bid price. Contractor shall provide permanent arrangements in various equipment/systems for conductance of Performance and Guarantee tests by the Owner periodically. Employer's/ Client's responsibility shall be limited to ensure power evacuation and arranging fuel.	For performance testing, provision of 100% load is client's responsibility	Provisions of Bid Documents are clear and shall Prevail. Employer's/Client's responsibility shall be limited to ensure power evacuation and arranging fuel.
229	-	-	-	-		If plant not commissioned after complete installation, Who will responsible for preservation of genset and other utility? And for how long? Who will bare cost of preservation?	The Preservation of facilities, if required after the complete installation shall be in the scope of Bidder. Further please refer clause 25 of GCC.
230	-	-	-	-		We are unable to locate the "cure period", which is generally provided or incorporated in commercial contracts. Moreover, considering the fact the geographical location or site location may pose difficulty in operation; consequently, delay in performance can- not be rule out. Therefore, we request that at least a cure period of 45 to 60 days should be provided; considering the quantum of liquidated damages.	Provisions of Bid Document shall prevail.

EPC Pkg for Andaman & Nicobar Gas Power Project (50 MW)
Pre Bid Clarifications

231.	-	-	-	-		What is the maximum lifting capability at the port, to lift equipment from ships onto the pier?	Bidder is required carry out all the due diligence
232.	-	-	-	-		Has a site access route survey been undertaken, and if so is this available, for transporting the gensets from the port to the site? What is max. load carrying capacity of road?	Bidder is required to visit the site and to carry out all the due diligence