## **ANNEXURE -1**

 $2\ X\ 750\ KVA\ DG\ Set\ Data\ Sheet\ (To\ be\ filled\ in\ by\ Bidder\ )$ 

Sr. No.	Special needs for the Genset back up for Critical Equipments.	Complied with Specifications (Fill in information)
1	Engine Make & Model Name/ No. (Technical specifications / literature / brochure must be attached)	
1.1	Engine Type	
1.2	Engine BHP	
1.3	Number of Cylinder	
1.4	RPM	
1.5	Type of Cooling	
1.6	Type of Starting	
1.7	Type of Governor, Make & Model Number	
1.8	Fuel consumption at 75 % load ( Litre /Hr)	
1.9	Fuel consumption at 100% load ( Litre /Hr)	
1.10	Lube Oil Consumption @ % of fuel consumption	
1.11	Lube oil change period in DG running hours or minimum Period in months	
1.12	Lube Oil Sump Capacity (Max) in Litre (High – Low Level)	

1.13	Total Lubrication System Lube Oil Capacity in Litre
1.14	Total Coolant capacity in Litres
1.15	Maximum time to start engine from cold and attain rated speed & ready to take one step load in Seconds
2	Alternator Make & Model Name/ No. (Technical specifications / literature / brochure must be attached)
2.1	KVA Rating
2.2	KW Rating
2.3	Class of Insulation
2.4	Excitation
2.5	Alternator Efficiency
2.6	Voltage Regulation in %
2.7	Waveform Distortion in %
2.8	Total Harmonic Distortion in %
2.9	Telephonic Harmonic Factor
2.10	Enclosure IP rating
2.11	Mounting

2.12	Terminal Box Provided	Yes/ No
2.13	Earthing Studs Provided	Yes/ No
3	Transient speed increase for sudden 100% decrease of load in %	
4	Transient speed decrease for sudden 100% increase of load in %	
5	Recovery Time in Seconds	
6	Overall Dimensions of Generator Set in mm (Length X Width X Height)	
7	DG Set Weight in Kg	
8	Battery Charger – Make & Model Number	
9	Battery Charger Ratings (Volt & Current)	
10	Batteries Rating (Voltage & AH)	
11	DG AMF & Synchronising Panel from approved panel manufacturer only (Give the name of panel manufacturer)	
12	Make & Model Number of AMF Controller	
13	Make & Model Number of Synchronisation Controller	
14	DG Set should accept 55% of rated capacity in one step.	Yes/ No
15	DG Sets panel shall be suitable for Auto synchronisation operation controlled through AMF/Synchronise Relay as well as manual operation.	Yes/ No
16	Vendor to provide one-source responsibility for the generating system and accessories.	Yes/ No
17	The generator set and its components are prototype-tested, factory-built, and production-tested.	Yes/ No
18	The product should provide support for monitoring various parameters of diesel generator set over WEB and SNMP".	Yes/ No

19	Name and Address of Service Center at Pune	
20	Response time from service centre after launching a complaint	
21	Response time for required spare parts from service centre after launching a complaint	
22	The Diesel Generator is to provide back up power when the electric mains power has a failure. The generator set is to have "primary continuous duty " application of providing power continuously for more than 16 hours on a given day. Please see the main specifications for additional details	Yes/ No
23	The Diesel Generator is to provide back up power to the uninterruptible power supplies of data centre/digital equipments and the cooling system equipments. The Generator has to meet the full load of UPS & Chiller (supporting the server equipments) in the event of mains failure in a single step after starting and stabilizing within 30 seconds in a seamless manner. In addition, the cooling equipment loads will get connected too. The DG SET of engine, alternator should be rated for meeting this step load application (near full load) on start up/running.	Yes/ No
24	The IUCAA has a comprehensive intelligent building management system for monitoring the parameters of electrical power, temperature, humidity, entry into data centre area, fire alarm and control. The Diesel Genset operational parameters as detailed in the main specifications have also to be monitored by the BMS. Parameters which are crucial for the reliable operation of data centre operation such as fuel and lubrication oil levels in the tanks/ sump respectively, line voltage, current, frequency, battery voltage, charging current, engine temperature are to be provided as analog/digital levels or codified digital data through specified interface. This is an essential requirement to be met by the vendors of the DG set. The scope of BMS for DG set include the transducers for all parameters, hardware and software system as applicable for transferring the parameter to main BMS with backnet protocols and local logging of the engine parameters on dedicated stand alone system too.	Yes/ No
25	A lubricating oil filter shall be provided for operation under normal conditions for a period of 500 hours/ One Year without the necessity of its replacement or cleaning	Yes/ No

27	approval. (The formats of all tests carried out at factory & at site with details of relevant standards as per latest standards & permissible limits should be submitted by DG vendor for reference along with tender).  Mandatory Spare Parts: The list of mandatory spares which are considered essential by the Supplier shall be indicated in the bid for successful operation of DG Set for 3 years. Price may also be quoted separately for these spares.  Warranty Period (after satisfactory installation, testing &	Yes/ No
26	The DG Sets shall be subjected to load tests at IUCAA site after installation in the presence of IUCAA's engineers with consultant. All the consumables required during testing of DG Sets at site shall be included in the scope of DG vendor. All consumables required during trial run of DG Sets on load for 13 hours out of which six hours for run up to full load, followed by six hours on full load and concluded by one hour 110% overload capacity to be arranged by DG vendor. Also, DG vendor to arrange the 110% Load bank availability for testing. The test shall be carried out as per Technical Specification & records to be submitted for	Yes/ No

## **Note**: 1) The venders should fill the above mentioned details.

2) OFFERS with "INCOMPLETE INFORMATION" ARE LIABLE TO BE REJECTED, which may be noted.

Seal & Signature of Bidder