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DEVELOPMENT
CORPORATION
LIMITED**



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**File No. HPSEDC/RC/DG-UPS/2K24-19540
e-Office File No.: 171099
Date: 11-02-2025**

Corrigendum-I

(Tender No. HPSEDC/RC/DG-UPS/2K24-19540)

HPSEDC published e-tender for Rate Contract for Supply, Installation, Testing & Commissioning (SITC) of various rating Diesel Generating sets water cooled, UPS and Inverters bearing tender No: HPSEDC/RC/DG-UPS/2K24-19540 on 08/01/2024.

Based on the queries received from the bidders, the changes/ modifications/ clarifications/ specifications in the tender Section(s)/ Clause(s) are incorporated in the tender document by issuing Corrigendum and is attached as **Annexure-A**.

Revised/newly added specifications are attached as **Annexure B**.

Last date for bid submission is extended from 08/02/2024 to 25/02/2025 till 2.30 PM and same will be opened on 27/02/2025 at 2.30PM.


Data Controller, HPSEDC

Sr. No.	(Page No.)	RFP Reference	Content of RFP requiring clarification	Points of clarification required	Clarifications/Revised clause may be read as
1	7	3.) SCHEDULE OF THE TENDER PROCESS: Sr. No. 4	Earnest Money Deposit (EMD): EMD would be as follows a) For UPS: Rs. 2,00,000/- (Rs. Two Lakh only) through Bank Draft/ through RTGS in HPSEDC Bank Account no. 050010200006521, IFS Code: UTIB0000050, Axis Bank, SDA Complex, Shimla-9, HP	<ul style="list-style-type: none"> ➤ This 2 Lakh EMD is for UPS & Batteries Both parts...Please confirm. ➤ Request to allow BG of same amount instead of DD/NEFT against EMD. 	<p style="text-align: center;">Clarification:</p> <p style="text-align: center;">Rs 2 Lakhs EMD is for both UPS and Batteries</p>
2	46	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS :Item No. 1: UPS -600VA OFFLINE UPS System or higher with single battery Sr. No. 14	Inverter Capacity >>75%	As per Indian industrial practice, the inverter efficiency of an offline UPS is typically only 60% since it is primarily designed for PC loads and low budget power backup solutions. Therefore, we kindly request you to amend it as "Inverter Capacity > 60%".	<p style="text-align: center;">Revised clause:</p> <p style="text-align: center;">Inverter Capacity - 60%</p>
3	46	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS :Item No. 1: UPS -600VA OFFLINE UPS System or higher with single battery Sr. No. 14	Inverter Capacity >>75%	As per Indian industrial practice, the inverter efficiency of an offline UPS is typically only 60% since it is primarily designed for PC loads and low budget power backup solutions. Therefore, we kindly request you to amend it as "Inverter Capacity > 60%".	<p style="text-align: center;">Revised clause:</p> <p style="text-align: center;">Inverter Capacity - 60%</p>
4	47	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS: Item No. 2: UPS -650VA OFFLINE UPS System or higher with double battery. Sr. No. 14	Inverter Capacity >>75%	As per Indian industrial practice, the inverter efficiency of an offline UPS is typically only 60% since it is primarily designed for PC loads and low budget power backup solutions. Therefore, we kindly request you to amend it as "Inverter Capacity > 60%".	<p style="text-align: center;">Revised clause:</p> <p style="text-align: center;">Inverter Capacity - 60%</p>

Sr. No.	(Page No.)	RFP Reference	Content of RFP requiring clarification	Points of clarification required	Clarifications/Revised clause may be read as
5	47	TECHNCIAL SPECIFICATIONS AND COMPLIANCE SHEETS ANNEXURES Sr. No. 18	Item No. 3: 1000VA or higher UPS OFFLINE with Min VAH: 168 VAH (inbuilt): Batteries	1000VA or higher UPS OFFLINE with min VAH of 336VAH(Inbuilt).	<p>Revised clause:</p> <p>Batteries:</p> <p>SMF (VRLA) Type to provide 30 min. backup Min VAH: 336 VAH (inbuilt)</p>
6	47	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS: Item No. 2: UPS -650VA OFFLINE UPS System or higher with double battery. Sr. No. 14	Inverter Capacity >>75%	As per Indian industrial practice, the inverter efficiency of an offline UPS is typically only 60% since it is primarily designed for PC loads and low budget power backup solutions. Therefore, we kindly request you to amend it as "Inverter Capacity > 60%".	<p>Revised clause:</p> <p>Inverter Capacity - 60%</p>
7	48	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS: Item No. 2:Item No. 3: 1000VA or higher UPS OFFLINE Sr. No. 14	Inverter Capacity >>75%	As per Indian industrial practice, the inverter efficiency of an offline UPS is typically only 60% since it is primarily designed for PC loads and low budget power backup solutions. Therefore, we kindly request you to amend it as "Inverter Capacity > 60%".	<p>Revised clause:</p> <p>Inverter Capacity - 60%</p>
8	48	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS: Item No. 2:Item No. 3: 1000VA or higher UPS OFFLINE Sr. No. 14	Inverter Capacity >>75%	As per Indian industrial practice, the inverter efficiency of an offline UPS is typically only 60% since it is primarily designed for PC loads and low budget power backup solutions. Therefore, we kindly request you to amend it as "Inverter Capacity > 60%".	<p>Revised clause:</p> <p>Inverter Capacity - 60%</p>

Sr. No.	(Page No.)	RFP Reference	Content of RFP requiring clarification	Points of clarification required	Clarifications/Revised clause may be read as
9	50	Item 5:- 2KVA or Higher online UPS system Sr. No. 28	Transients - All Critical source and sensitive loads should have protection from Transients	Please confirm whether customer will provide SPD or MCB for this protection OR bidder have to supply the same along with UPS	Clarification: SPD or MCB to be provided by the bidder
10	50	Item 5:- 2KVA or Higher online UPS system/28. Transients	All Critical source and sensitive loads should have protection from Transients	Please confirm can you SPD or MCB for this protection? We didn't understand this clause.	Clarification: SPD or MCB to be provided by the bidder
11	54	Item 10: - 10KVA online UPS (Three phase Sr. No. 4		The input & output phases of UPS not mentioned. Kindly also I/O Phases of UPS	Clarification: 3 phase in and single out
12	54	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 10: 10KVA ONLINE UPS (Three Phase) Sr. No. 6	Input Phase Single in/1 Phase out	In the headline item no 10 you have mentioned three phase but here you have asked for single phase which may be a typo error therefore please amend it as Input Phase three in/1 Phase out	Clarification: 3 phase in and single out
13	54	item no. 10 (10KVA UPS : 3 Phase in -1 phase out) Sr. No. 4	Input Voltage & Range: 230VAC (1Ph+ N) Range 200V-400V AC (1-Phase) @ 100% load	Input Voltage & Range: 415VAC (3Ph+ N+E) ,Range 320V-400V AC (3-Phase) @ 100% load	Revised clause: Input Voltage & Range: 230VAC (1Ph+ N) Range 320V-480V AC (1-Phase) @ 100% load

Sr. No.	(Page No.)	RFP Reference	Content of RFP requiring clarification	Points of clarification required	Clarifications/Revised clause may be read as
14	54	Item 10:- 10KVA online UPS (Three phase)/4.Input Voltage ad Range	230VAC (1Ph+ N) Range 200V 400V AC (1-Phase) @ 100% load	Please Confirm input & output phases of UPS.	Clarification: 3 phase in and single out
15	54	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 10: 10KVA ONLINE UPS (Three Phase) Sr. No. 4	Input Voltage & Range 230VAC (1Ph+ N) Range 200V-400V AC (1-Phase) @ 100% load	As per industrial Standard the Input voltage range of an three Phase UPS comes with input Volatge range for three phase ups is 165 ~ 280 VAC (ph-N)/ 285V~ 485VAC (ph-ph) Only, therefore we requeest you to please amend this clause as Input Voltage & Range 165 ~ 280 VAC (ph-N)/ 285V~ 485VAC (ph-ph)	Revised clause: Input Voltage & Range: 230VAC (1Ph+ N) Range 320V-480V AC (1-Phase) @ 100% load
16	54	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 10: 10KVA ONLINE UPS (Three Phase) Sr. No. 6	Input Phase Single in/1 Phase out	In the headline item no 10 you have mentioned three phase but here you have asked for single phase which may be a typo error therefore please amend it as Input Phase three in/1 Phase out	Clarification: 3 phase in and single out
17	55	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 11: 20KVA ONLINE UPS (Three Phase in/ One Phase out) Sr. No. 3	Overall Efficiency >=90%	As per standard industrial practice, the overall efficiency of an online UPS typically stands at 88% only. This is primarily due to the utilization of an isolation transformer at the output side, which reduces the efficiency of the UPS. Consequently, we kindly request you to amend this clause to state that the overall efficiency should be equal to or greater than 88%.	Revised clause: Overall Efficiency >=94%

Sr. No.	(Page No.)	RFP Reference	Content of RFP requiring clarification	Points of clarification required	Clarifications/Revised clause may be read as
18	55	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 11: 20KVA ONLINE UPS (Three Phase in/ One Phase out) Sr. No. 3	Overall Efficiency >=90%	As per standard industrial practice, the overall efficiency of an online UPS typically stands at 88% only. This is primarily due to the utilization of an isolation transformer at the output side, which reduces the efficiency of the UPS. Consequently, we kindly request you to amend this clause to state that the overall efficiency should be equal to or greater than 88%.	Revised clause: Overall Efficiency >=94%
19	62	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 26 : 850 VA INVERTER Sr. No. 16	Input Frequency: 45 - 55 Hz ± 10	As per industrial Standard tolerance in input frequency is ± 1Hz therefore we request you to please amend it as Input Frequency: 45 - 55 Hz ± 1Hz	Revised clause: Input Frequency: 45 - 55 Hz ± 1Hz
20	62	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 26 : 850 VA INVERTER Sr. No. 16	Input Frequency: 45 - 55 Hz ± 10	As per industrial Standard tolerance in input frequency is ± 1Hz therefore we request you to please amend it as Input Frequency: 45 - 55 Hz ± 1Hz	Revised clause: Input Frequency: 45 - 55 Hz ± 1Hz
21	64	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 27 : 1050 VA INVERTER Sr. No. 16	Input Frequency 45 - 55 Hz ± 10	As per industrial Standard tolerance in input frequency is ± 1Hz therefore we request you to please amend it as Input Frequency: 45 - 55 Hz ± 1Hz	Revised clause: Input Frequency: 45 - 55 Hz ± 1Hz

Sr. No.	(Page No.)	RFP Reference	Content of RFP requiring clarification	Points of clarification required	Clarifications/Revised clause may be read as
22	64	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 27 : 1050 VA INVERTER Sr. No. 16	Input Frequency 45 - 55 Hz \pm 10	As per industrial Standard tolerance in input frequency is \pm 1Hz therefore we request you to please amend it as Input Frequency: 45 - 55 Hz \pm 1Hz	Revised clause: Input Frequency: 45 - 55 Hz \pm 1Hz
23	65	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 28 : 1500 VA INVERTER Sr. No. 16	Input Frequency 45 - 55 Hz \pm 10	As per industrial Standard tolerance in input frequency is \pm 1Hz therefore we request you to please amend it as Input Frequency: 45 - 55 Hz \pm 1Hz	Revised clause: Input Frequency: 45 - 55 Hz \pm 1Hz
24	65	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 28 : 1500 VA INVERTER Sr. No. 16	Input Frequency 45 - 55 Hz \pm 10	As per industrial Standard tolerance in input frequency is \pm 1Hz therefore we request you to please amend it as Input Frequency: 45 - 55 Hz \pm 1Hz	Revised clause: Input Frequency: 45 - 55 Hz \pm 1Hz
25	66	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 29 : 2.75 KVA INVERTER Sr. No. 4	TRANSFER TIME < 10 ms volt \pm 10 volt	As per industrial Standard TRANSFER TIME for an UPS from amins to bacttery is < 10 ms therefore we request you to please amend it as TRANSFER TIME for an UPS from amins to bacttery is < 10 ms	Revised clause: TRANSFER TIME < 10 ms

Sr. No.	(Page No.)	RFP Reference	Content of RFP requiring clarification	Points of clarification required	Clarifications/Revised clause may be read as
26	66	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 29 : 2.75 KVA INVERTER Sr. No. 5	TRANSFER MECHANISM: SCR Based	As per industrial Standard the transfer mechanism of an inverter system is designed with Relay mechanism therefore we request you to please amend this clause as TRANSFER MECHANISM: relay Based	Revised clause: TRANSFER MECHANISM: Relay Based
27	66	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 29 : 2.75 KVA INVERTER Sr. No. 4	TRANSFER TIME < 10 ms volt \pm 10 volt	As per industrial Standard TRANSFER TIME for an UPS from mains to battery is < 10 ms therefore we request you to please amend it as TRANSFER TIME for an UPS from mains to battery is < 10 ms	Revised clause: TRANSFER TIME < 10 ms
28	66	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 29 : 2.75 KVA INVERTER Sr. No. 5	TRANSFER MECHANISM: SCR Based	As per industrial Standard the transfer mechanism of an inverter system is designed with Relay mechanism therefore we request you to please amend this clause as TRANSFER MECHANISM: relay Based	Revised clause: TRANSFER MECHANISM: Relay Based
29	67	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 30 : 3.70 KVA INVERTER Sr. No. 4	TRANSFER TIME < 10 ms volt \pm 10 volt	As per industrial Standard TRANSFER TIME for an UPS from mains to battery is < 10 ms only therefore we request you to please amend it as TRANSFER TIME < < 10 ms	Revised clause: TRANSFER TIME < 10 ms

Sr. No.	(Page No.)	RFP Reference	Content of RFP requiring clarification	Points of clarification required	Clarifications/Revised clause may be read as
30	67	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 30 : 3.70 KVA INVERTER Sr. No. 5	TRANSFER MECHANISM: SCR Based	As per industrial Standard the transfer mechanism of an inverter system is designed with Relay mechanism therefore we request you to please amend this clause as "TRANSFER MECHANISM: relay Based"	Revised clause: TRANSFER MECHANISM: Relay Based
31	67	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 30 : 3.70 KVA INVERTER Sr. No. 4	TRANSFER TIME < 10 ms volt ± 10 volt	As per industrial Standard TRANSFER TIME for an UPS from mains to battery is < 10 ms only therefore we request you to please amend it as TRANSFER TIME < < 10 ms	Revised clause: TRANSFER TIME < 10 ms
32	67	ANNEXURE-I; SECTION-5, TECHNICAL SPECIFICATIONS Item No. 30 : 3.70 KVA INVERTER Sr. No. 5	TRANSFER MECHANISM: SCR Based	As per industrial Standard the transfer mechanism of an inverter system is designed with Relay mechanism therefore we request you to please amend this clause as "TRANSFER MECHANISM: relay Based"	Revised clause: TRANSFER MECHANISM: Relay Based
33	46, 47, 48	TECHNCIAL SPECIFICATIONS AND COMPLIANCE SHEETS ANNEXURES Sr. No. 14	Item No. 1,2 & 3: UPS -600VA,650VA & 100VA OFFLINE UPS System : Inverter Capacity > 75%	For All Offline UPS system inverter efficiency is in the range of 60%-70% for all the reputed UPS OEM's , so request to consider up to 60-70% Inverter Capacity up to 60-70%	Revised clause: Inverter Capacity - 60%

Sr. No.	(Page No.)	RFP Reference	Content of RFP requiring clarification	Points of clarification required	Clarifications/Revised clause may be read as
34	46-49	Quality & Safety Standards	In all 1 KVA to 20KVA online UPS systems no Quality & Safety standards related to Product has been considered.	Quality & Safety Standards: Products should be either BIS / CE Certified with EN / IEC 62040-1,2 & 3 certification/ with ROHS certification. BIS- MII Products should be preferred.	Clarifications: Relevant exemptions exist in the bid document
35	49-56	TECHNCIAL SPECIFICATIONS AND COMPLIANCE SHEETS ANNEXURES Sr. No. 18 (serial no.11) : For almost All Online UPS rating : (Item no. 4 to 12)	Harmonic Distortion (THD): for Item No .5, Item No .6, Item No .7, Item No .8, Item No .9, Item No .10, Item No .11, Item No 12	Harmonic Distortion (THD) : $\leq 3\%$ THD (linear load) $\geq 5\%$ THD(Non-linear load)	Revised clause: Harmonic Distortion (THD) : $\leq 3\%$ THD (linear load) $\geq 5\%$ THD(Non-linear load)
36	51-52	item no. 7 (5KVA UPS), item no. 8 (6KVA UPS) Sr. No. 14	Output Power factor > 0.9	Output Power factor > 0.8	Revised clause: Output Power factor = Unity
37	52-56	item no. 8 (6KVA UPS), item no. 9 (10KVA UPS), item no. 10 (10KVA UPS:3:1), item no.11 (20KVA UPS:3:1), item no. 12 (20KVA UPS: 3:3),	General Operating Temperature: 0 to 90%RH @ 0-50 degree C (non-condensing)	General Operating Temperature: 0 to 90%RH @ 0-40 degree C (non-condensing)	Revised clause: General Operating Temperature: 0 to 90%RH @ 0-40 degree C (non-condensing)

Sr. No.	(Page No.)	RFP Reference	Content of RFP requiring clarification	Points of clarification required	Clarifications/Revised clause may be read as
38	NA	NA	NA	Keeping in view the continuous improvement in the IT (going towards unity power factor) and UPS technologies we request you to kindly consider 6KVA/6KW, 10KVA/10KW, 20KVA/20KW (means unity power factor at output) as all reputed brands who were present in pre bid are having this product, We are also attaching product leaflets of competition brands along with this letter, by adding this feature customer shall be benefitted by getting the more output power from the UPS system.	<p>Revised clause:</p> <p>1KVA to 3KVA @ 0.9 and Onwards 5KVA to 20 KVA power factor is unity.</p>
39	NA	NA	NA	The UPS should be Li-Ion compatible, because in future all SMF batteries shall be replaced by Li-Ion batteries, because of the advantages of the Li-Ion batteries.	<p>Newly added clause:</p> <p>Item no 1 to 12: UPS should be Li-ion compatible.</p>

Item No. 14: 3 KVA Portable Generator Set

Name of the Item	Description	Compliance Yes/ No Make & Model No.
3 KVA portable generator set	Portable Generator set of 3 KVA (LATEST CPCB NORMS COMPLIANT) having petrol engine, producing 4.08 bhp at 3000 rpm, 1 Nos. 12 Volts DC Battery with Battery Leads, fuel tank etc. with three years onsite warranty.	

Item No. 15: 5 KVA DG set water cooled

Name of the Item	Description	Compliance Yes/ No Make & Model No.
5 KVA DG set water cooled	5 KVA / 4 KW Silent Diesel Generating set – Air Cooled Diesel Engine (LATEST CPCB NORMS COMPLIANT) producing 8 or higher bhp at 1500 rpm. under NTP conditions having Single cylinder Naturally Aspirated with Class A-1 / A-2 Governor, coupled to a 5 KVA Single phase , alternator of 0.8 power factor with H Class Insulation, 230 volts, 50 Hz, 2 wires on a common base frame complete with AMF Control Panel , 1 Nos. 12 Volts DC Battery with Battery Leads, fuel tank & soundproof acoustic enclosure duly approved by CPCB Authorized lab. with three years onsite warranty.	

Item No. 16: 10 KVA DG set water cooled

Name of the Item	Description	Compliance Yes/ No Make & Model No.
10 KVA DG set water cooled	10 KVA / 8 KW silent DG set comprising of Water Cooled Diesel Engine (LATEST CPCB IV+ NORMS COMPLIANT), Minimum 3 cylinders , Naturally Aspirated, developing 20.9 BHP or better @ 1500 RPM , Class A-1 / A-2 Governor & 10 KVA Alternator rated at 1 Phase, 230 Volts, 50 Hz; 0.8 p.f. @ 1500 RPM both mounted, and aligned on a common MS base frame complete with MS Fuel Tank, Residential Exhaust Silencer, AVM Pads fitted on base frame, 1 Nos. 12 Volts DC Battery with Battery Leads, 1 st fill of Lube Oil, all housed in Sound Proof Acoustic Enclosure with AMF Control Panel with 3Years /5000 Hrs onsite warranty.	

Item No. 17: 15 KVA DG set water cooled

Name of the Item	Description	Compliance Yes/ No Make & Model No.
15 KVA DG set water cooled	15 KVA / 12 KW silent DG set comprising of Water-Cooled Diesel Engine (LATEST CPCB IV+ NORMS COMPLIANT), Mini. 3 cylinders , Naturally Aspirated, developing 20.9 BHP or better @ 1500 RPM , Class A-1 / A-2 Governor & 15 KVA Alternator rated at 1 Phase, 230 Volts, 50 Hz; 0.8 p.f. @ 1500 RPM both mounted, and aligned on a common MS base frame complete with MS Fuel Tank, Residential Exhaust Silencer, AVM Pads fitted on base frame, 1 Nos. 12 Volts DC Battery with Battery Leads, 1 st fill of Lube Oil, all housed in Sound Proof Acoustic Enclosure with AMF Control Panel with Three years/5000 Hrs onsite warranty with Remote Monitoring System and Engine Cold Starting kit.	

Item No. 18: 25 KVA DG set water cooled

Name of the Item	Description	Compliance Yes/ No Make & Model No.
25 KVA DG set water cooled	25 KVA / 20 KW Silent Diesel Generating set - Water Cooled Diesel Engine (LATEST CPCB IV+ NORMS COMPLIANT) producing 36 BHP at 1500 rpm. under NTP conditions having 3 cylinders, Class A-1 / A-2 Governor, naturally aspirated, coupled to a 25 KVA, single / three phase alternator of 0.8 power factor, 230/415 volts, 50 Hz complete with an AMF control panel , 1 Nos. 12 Volts DC Battery with Battery Leads, fuel tank & soundproof acoustic enclosure with three years/5000 Hrs onsite warranty with Remote Monitoring System and Engine Cold Starting kit.	

Item No. 19: 40 KVA DG set water cooled

Name of the Item	Description	Compliance Yes/ No Make & Model No.
40 KVA DG set water cooled	40 KVA / 32 KW Silent Diesel Generating set - Water Cooled Diesel Engine (LATEST CPCB IV+ NORMS COMPLIANT) producing minimum 56 BHP at 1500 rpm. under NTP conditions having 3 / 4 cylinders, Class A-1 / A-2 Governor, Engines should be turbo charger inter cooler,	

	coupled to a 40 KVA, 3 Phase Alternator of 0.8 power factor, 415 Volts, 50 Hz complete with an AMF control panel , 1 Nos. 12 Volts DC Battery with Battery Leads, fuel tank & soundproof acoustic enclosure with three years/5000 Hrs onsite warranty with Remote Monitoring System and Engine Cold Starting kit..	
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Item No. 20: 45 KVA DG set water cooled

Name of the Item	Description	Compliance Yes/ No Make & Model No.
45 KVA DG set water cooled	45 KVA / 36 KW Silent Diesel Generating set - Water Cooled Diesel Engine (LATEST CPCB IV+ NORMS COMPLIANT) producing minimum 56 BHP or better @1500 rpm. under NTP conditions having Mini. 4 cylinders , Class A-1 / A-2 Governor, Turbo charge Inter Cooler, coupled to a 45 KVA, 3 Phase Alternator of 0.8 power factor, 415 Volts, 50 Hz complete with an AMF control panel , 1 Nos. 12 Volts DC Battery with Battery Leads, fuel tank & soundproof acoustic enclosure with three years/5000 Hrs onsite warranty with Remote Monitoring System and Engine Cold Starting kit..	

Item No. 21: 58.5 KVA DG set water cooled

Name of the Item	Description	Compliance Yes/ No Make & Model No.
58.5 KVA DG set water cooled	58.5 KVA / 46.8 KW Silent Diesel Generating set - Water Cooled Diesel Engine (LATEST CPCB IV+ NORMS COMPLIANT) producing 74 BHP at 1500 rpm. under NTP conditions having 4 cylinders, Class A-1 / A-2 Governor, Engines should be turbo charger inter cooler., coupled to a 62.5 KVA, 3 Phase Alternator of 0.8 power factor, 415 Volts, 50 Hz complete with an AMF control panel , 1 Nos. 12 Volts DC Battery with Battery Leads, fuel tank & soundproof acoustic enclosure with two years/5000 Hrs onsite warranty with Remote Monitoring System and Engine Cold Starting kit..	

Item No. 22 : 100 KVA DG set water cooled

Name of the Item	Description	Compliance Yes/ No Make & Model No.
100 KVA DG set water cooled	100 KVA / 80 KW Silent Diesel Generating set - Water cooled Diesel Engine (LATEST CPCB IV+ NORMS COMPLIANT) producing 156 BHP or better at 1500 rpm. under NTP conditions having 4 cylinders, Class A-1 / A-2 Governor, Engines should be turbo charger inter cooler., coupled to a 125 KVA, 3 Phase Alternator of 0.8 power factor, 415 Volts, 50 Hz complete with an AMF control panel , 1 Nos. 12 Volts DC Battery with Battery Leads, fuel tank & soundproof acoustic enclosure with three years/5000 Hrs onsite warranty with Remote Monitoring System and Engine Cold Starting kit..	

Item No. 23 : 125 KVA DG set water cooled

Name of the Item	Description	Compliance Yes/ No Make & Model No.
125 KVA DG set water cooled	125 KVA / 100 KW Silent Diesel Generating set - Water cooled Diesel Engine (LATEST CPCB IV+ NORMS COMPLIANT) producing 156 BHP at 1500 rpm. under NTP conditions having 4 cylinders, Class A-1 / A-2 Governor, Engines should be turbo charger inter cooler., coupled to a 125 KVA, 3 Phase Alternator of 0.8 power factor, 415 Volts, 50 Hz complete with an AMF control panel , 1 Nos. 12 Volts DC Battery with Battery Leads, fuel tank & soundproof acoustic enclosure with three years/5000 Hrs onsite warranty with Remote Monitoring System and Engine Cold Starting kit..	

Item No. 24 : 200 KVA DG set water cooled

Name of the Item	Description	Compliance Yes/ No Make & Model No.
200 KVA DG set water cooled	200 KVA / 160 KW Silent Diesel Generating set - Water cooled Diesel Engine (LATEST CPCB IV+ NORMS COMPLIANT) producing 250 BHP or better at 1500 rpm. under NTP conditions having 6 cylinders, Class A-1 Governor, Engines should be turbo charger inter cooler, coupled to a 200 KVA, 3 Phase Alternator of 0.8 power factor, 415 Volts, 50 Hz complete with an AMF control panel , 2 Nos. 24 Volts DC Battery with Battery Leads, fuel tank & soundproof acoustic enclosure, Governing system should be electronic with three years/5000 Hrs onsite warranty with Remote	

	Monitoring System and Engine Cold Starting kit..	
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Item No. 25: 250 KVA DG set water cooled

Name of the Item	Description	Compliance Yes/ No Make & Model No.
250 KVA DG set water cooled	250 KVA / 200 KW Silent Diesel Generating set - Water cooled Diesel Engine (LATEST CPCB IV+ NORMS COMPLIANT) producing 310 BHP or better at 1500 rpm. under NTP conditions having 6 cylinders, Class A-1 Governor, Engines should be turbo charger inter cooler, coupled to a 250 KVA, 3 Phase Alternator of 0.8 power factor, 415 Volts, 50 Hz complete with an AMF control panel , 2 Nos. 24 Volts DC Battery with Battery Leads, fuel tank & soundproof acoustic enclosure, Governing system should be electronic with three years/5000 Hrs onsite warranty with Remote Monitoring System and Engine Cold Starting kit.	