

NOTICE INVITING REQUEST FOR PROPOSAL (RFP) FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING (SITC) OF DIESEL GENERATOR SET IN BARODA HOUSE, MANDVI AND SAINATH PLAZA, WING-B, VADODARA

(RFP Reference: BB/FM/113/RFP/3 dated: December 3rd, 2021)

Last Date of Submission of Bid: December 24th, 2021 before 1100 hrs

ADDENDUM – I

We refer to the Pre-Bid Meeting held at our Baroda Bhavan, Head Office, Vadodara on December 10th, 2021 at 1100 hrs wherein no prospective bidder participated.

However, we have re-scrutinized the RFP and the addendum for the RFP reference BB/FM/113/RFP/3 dated: December 3rd, 2021 is as under:

Bidders are advised to take note of the above points while submitting the RFP.

S.No.	Existing Clause / Annexure	Updated Clause
1.	<u>OEM AUTHORISATION LETTER</u>	<u>Revised OEM AUTHORISATION LETTER – Attached</u>
1.	<u>Envelope-2 – Financial Bid</u>	<u>Envelope-2 – Revised Financial Bid– Attached.</u>

The bidders should submit revised Financial Bid only. The addendum shall form part of the RFP. The same shall be sealed and signed as acceptance of those conditions without any modifications and submitted along with the Bid. Non-Acceptance of the Addendum by the Bidder or adding any other condition shall be treated as conditional RFP and will not be considered, hence rejected. Last date of submission of bid is December 24th, 2021 before 1100 hrs.

BB/FM/113/164
Dated: 16/12/2021

Sd./-
Assistant General Manager
(FM & Security)

OEM AUTHORISATION LETTER

Original Equipment Manufacturer's authorization letter (in Original Letter Head of OEM)
To,

The Assistant General Manager,
(FM & Security),
Head Office, Baroda Bhavan,
RC Dutt Road, Alkapuri,
Vadodara – 390 007

Sir,

Subject : Direct Manufacturers Authorization
Ref : RFP No: dated-----

Name of Work: Supply, Installation, Testing and Commissioning of 01 No. of 160 kVA DG Set and 125 kVA DG Set for Bank of Baroda, Head Office, Vadodara.

We....., an established and reputable manufacturer of Diesel Generator having Corporate/ Registered office at(address of OEM) do hereby authorize (name of contractor) and having their Office at (contractor's address) as our representative to submit a above bid.....dt.....and subsequently negotiate and sign the contract with you for the supply of goods manufactured by us and authorize the said firm to act on our behalf in fulfilling any or all installation, technical support and maintenance obligation as required by the contract

We hereby confirm and extend our CAMC services of three years after DLP of one year for the products supplied by the above contractor for the said work.

Yours faithfully,
For

Signature of Officer Authorized to sign this Document on behalf of the OEM.

FINANCIAL BID

ENVELOPE - 2

Part – A – Diesel Generator Set for Baroda House, Mandvi, Vadodara

(In Rupees)

S.No.	Description of Items	Quantity	Unit	Rate In words	Rate In figures	Amount
1	<p>Supply, Installation, Testing and Commissioning of silent type Diesel Generating set having Prime Power Rating of 160 KVA at 415 volts 3 phase at 1500 RPM, 0.8 lagging power factor suitable for 50 Hz 3 phase system and for 0.85 load factor and consisting of the followings.</p> <p>(a) Diesel Engine: Diesel engine 4 stroke, turbo charged, water cooled, electric start of 197 BHP at 1500 to 1800 RPM suitable for above output of alternator at 40 Degree C, capable of taking 10% over loading for one hour after 12 hours of continuous operation. The engine will be fitted complete with all the required accessories.</p> <p>(B) Engine mounted instrument Panel fitted with and having digital display for following:</p> <p>(i) Start stop switch (ii) Water temperature indication (iii) Lubrication oil pressure indication (iv) Battery charging indication (v) RPM indication (vi) Engine Hours indication</p> <p>(C) Alternator Synchronous alternator rated 160 KVA at 1500 to 1800 RPM, 3 Phase, 415 volts, 50 Hz, AC supply with 0.8 lagging power factor at 40 Degree C. The alternator shall be having SPDP enclosure IP 23. Brushless single bearing type, Continuous duty, self-excited.</p>	1	Set			

	<p>(D) Base Frame and Foundation: Both the engine and alternator shall be mounted on suitable base frame made of M.S. Channel. The complete D.G. Set shall be mounted in as acoustic enclosure which shall be installed on a suitable MS structure on min 3 metre height. .</p> <p>(E) Fuel Tank : Daily Service fuel tank of fabricated out of 3 mm thick M.S. sheet complete with all standard accessories and fuel piping between fuel tank and diesel engine with MS class 'C' pipes of suitable dia complete with valves, level indicators & accessories as required as per specifications.</p> <p>(F) Exhaust System : Dry exhaust manifold with residential exhaust silencer to meet CPCB norms.</p> <p>(G) Starting System : 12 V DC starting system comprising of starter motors charging alternator and complete with one no. 12 V SMF Lead acid type battery as required as per specification.</p>					
	<p>(g) Enclosure : Acoustic and weather proof enclosure with arrangement for fresh air intake for cooling of the engine and alternator, extraction , discharging hot air into the atmosphere and to meet latest noise pollution norms (CPCB norms)</p>					
2	Supply, erection, testing and commissioning of 0.5 HP Flame proof Diesel Filling Pump With starter & Power & Control Cable.	1	Set			

3	Supply, erection, testing and commissioning of 25 mm UPVC Pipe including Wall Cutting, Excavation & Minor Civil Work etc as per Engineer in charge.	20	Metre			
4	Supply, erection, testing and commissioning of High Pressure 25 mm Brush Nozzle Valve.	1	Set			
5	Supply, erection, testing and commissioning of Automation base Panel (DG Set Monitoring & ON OFF Indication etc.) Siemens Make :- CPU 1214C, DC/DC/DC 1 Nos, Communications processor CP 1242-7 LTE EU - 1 Set , ANT896-4ME mobile wireless antenna for GSM (2G), UMTS (3G) and LTE(4G) Networks, -- 1 Nos. MFM Metre With RS485- 1 Nos, N-Connect/SMA male/ male flexible connection cable pre-assembled, Length 5 m, flexible connecting cable SCALANCE W antenna 1 Set. , Control Panel 600 w* 600 h* 300d - 1 Nos, MCB DP 4AMP For SMPS Input - 1 Nos, POWER SUPPLY 4.5AMP - 1 Nos., CIRCUIT BREAKER C60H-DC 500VDC 4A 2P C- 1 Nos, 4" Fan- 1 Nos, 4" Filter 130 X 130 - 2 Nos., Grill For 4" Fan -1 Nos, LED LIGHT - 1 nos, PVC BOX 1 PLUGE 2 SWITCH - 1 Set, with On off Switch and Control Cable.	1	Set			
6	Supply, erection, testing and commissioning of ancillary item of work as mentioned below for DG sets.					

	a) Provide & fixing exhaust piping with bends, flanges packing, hardwares, ii) 100 mm dia medium class MS pipe	48	Metre			
	b) Provide and fix insulation of exhaust pipe with 50mm mineral wool having a density of 24Kg./Sq.mm.(U.P twiga/FGP) covered with wire mesh 26g aluminium cladding. ii) 100 mm dia medium class MS pipe	48	Metre			
7	MS STRUCTURE WORK					
	Supply, fabricated, transportation, hoisting, erection & painting of MS structure i.e channel angles, plates, flat, beam sheet etc. as per design including anchor bolts / dash fasteners/ bolts & nuts/hardwares etc. as required complete with painting with one coat of primer and two coats of synthetic enamel paint as per approved shade for exhaust stack, exhaust pipe supports fuel line supports etc. complete in all respects.	500	Kg			
8	Supply, Laying, installation, testing and commissioning of following sizes of PVC insulated PVC sheathed copper / aluminium conductor armoured cable to be laying in existing cable trench or to be laid in existing pipes of with necessary clamps, spacers with cleating on wall ceiling etc. complete to the satisfaction of EIC. (LENTH TO BE VERIFY AT SITE)					
a)	3.5 x 240 Sq.mm Alu. Arm Cable (For DG To Main Panel)	85	Metre			
f)	4C x 6 sq mm Cu Arm Cable (For Diesel Pump)	80	Metre			
g)	4C x 2.5 sq mm Cu Arm Cable (For DG Battery power cable)	100	Metre			
h)	6C x 1.5 sq mm Cu Arm Cable (For DG Controlling)	100	Metre			

9.0	End termination of following PVC insulated armoured cables including supply and fixing of brass single compression type cable glands and crimping type aluminium / copper lugs suitable for terminations of armoured cables of following overall diaMetres,					
a)	3.5 x 240 Sq.mm Alu. Arm Cable	3	Set			
f)	4C x 6 sq mm Cu Arm Cable	2	Set			
g)	4C x 2.5 sq mm Cu Arm Cable	2	Set			
h)	6C x 1.5 sq mm Cu Arm Cable	3	Set			
10	Making trench in soft soil of suitable width of 90 cms deep for laying cable or locating the fault all over the run and backfilling the same and making the surface as normal ground.	85	Metre			
11	Making trench in Hard Murrum / Tar Road of suitable width of 90 cms or required depth for laying any size of cable or locating the fault all over the run and back filling the same and making the surface as normal ground.	30	Metre			
12	Mains with ISI marked, 1.5KV grade electrolyte multi stranded, annealed copper conductor with heat resistant PVC insulated conforms to IS 694, IEC - 227 erected in PVC pipe of following size with required size of copper lugs, nuts and bolts if required.					

	(i) One wire 70.00 sq. mm	100	Metre			
	(i) One wire 25.00 sq. mm	75	Metre			
13	<p>Supplying & erecting of MAINTENANCE FREE EARTHING Station -- Supplying & erecting stations for equipment earthing as shown and specified in drawing for equipment complete with : Earth electrode/Rod - High-grade solid steel rods molecularly bonded with 99.9% pure electrolytic copper with minimum coating thickness of 250 microns should be used as earth electrode. The rods must be UL listed as well as tested according to IEC62561-2 and comply to the requirements of IEC 60364-5-54. all should be CPRI and MSME tested product. with Earth enhancement compound – All earth enhancement compound should comply IEC 62561-7 and should be tested for Corrosion test, determination of resistivity test and toxicity test analysed as per EPA 1311(TCLP), with Universal clamp – It should be of material SS 304 grade including Hex Head Screw for attaching flat conductors and it should comply as per IEC 62561-7, Earth Inspection Chamber – It should be of poly ethylene material hard drawing plastic suitable for heavy load upto 5000kg (49kN) with openable lid and required space for inspection of resistance of rod.Rod should also withstand short circuit current as per below 17mm rod – 20kA RMS which possess excellent electrical conductivity with high charge dissipation. Back filling Compound: 1 no. Bag of 25 Kg.</p>	5	Nos			

14	25 x 6 mm G.I. Strip - with Green Insulation Supply & Fixing.	98	Metre			
15	25 x 3 Cu Strip - With Green Insulation Supply & Fixing (For Delicate earthing All floor Separate)	60	Metre			
16	25 x 6 Gi strip Earthling 400 mm Length With Required IP 55 Enclosure Supply & Fixing.	2	Nos			
17	26 x 6 CU strip Earthling 400 mm Length With Required IP 55 Enclosure Supply & Fixing.	2	Nos			
18	8 SWG CU. Wire with 20 mm dia. PVC rigid conduit duly cleated / concealed / buried in floor etc. complete.	100	Metre			
19	8 SWG GI. Wire with 20 mm dia. PVC rigid conduit duly cleated / concealed / buried in floor etc. complete.	50	Metre			
20	450 mm x 50 mm x 2 mm Hot dip GI Cable Tray Supply & Laying.	60	Metre			
21	250mm x 50 x 2 mm Hot dip GI Cable Tray Supply & Laying.	60	Metre			
22	Cable tray Fixing MS Fabrication Work (25mm x 5 mm MS Angle) including Cutting welding drilling & 2 coat Painting as Required engineering Charge.	100	Kg			
Part A Total	TOTAL COST OF WORK					
	Rs.					

Note: In case of any discrepancy, total cost quoted in words will be considered.

Part – B – Diesel Generator Set for Sainath Plaza, Wing-B, Vadodara

(In Rupees)

S.No.	Description of Items	Quantity	Unit	Rate In words	Rate In figures	Amount
1	<p>Supply, Installation, Testing and Commissioning of silent type Diesel Generating set having Prime Power Rating of minimum 125 KVA at 415 volts 3 phase at 1500 RPM, 0.8 lagging power factor suitable for 50 Hz 3 phase system and for 0.85 load factor and consisting of the followings.</p> <p>(a) Diesel Engine: Diesel engine 4 stroke, turbo charged, water cooled, electric start of 81 BHP at 1500 to 1800 RPM suitable for above output of alternator at 40 Degree C, capable of taking 10% over loading for one hour after 12 hours of continuous operation. The engine will be fitted complete with all the required accessories.</p> <p>(B) Engine mounted instrument Panel fitted with and having digital display for following: (i) Start stop switch (ii) Water temperature indication (iii) Lubrication oil pressure indication (iv) Battery charging indication (v) RPM indication (vi) Engine Hours indication</p> <p>(C) Alternator Synchronous alternator rated 125 KVA at 1500 to 1800 RPM, 3 Phase, 415 volts, 50 Hz, AC supply with 0.8 lagging power factor at 40 Degree C. The alternator shall be having SPDP enclosure IP 23. Brushless single bearing type, Continuous duty, self-excited.</p>	1	Set			

	<p>(D) Base Frame and Foundation : Both the engine and alternator shall be mounted on suitable base frame made of M.S. Channel. The complete D.G. Set shall be mounted in as acoustic enclosure which shall be installed on a suitable cement concrete foundation. <u>(Including Cement Concrete Foundation 5 Metre Length x 2.5 Metre Width x 0.6 Metre Height Up Floor Level - As Per Manufacturer Required).</u></p> <p>(E) Fuel Tank : Daily Service fuel tank of fabricated out of 3 mm thick M.S. sheet complete with all standard accessories and fuel piping between fuel tank and diesel engine with MS class 'C' pipes of suitable dia complete with valves, level indicators & accessories as required as per specifications.</p> <p>(F) Exhaust System : Dry exhaust manifold with residential exhaust silencer to meet CPCB norms.</p> <p>(G) Starting System : 12 V DC starting system comprising of starter motors charging alternator and complete with one no. 12 V SMF Lead acid type battery as required as per specification.</p>					
	<p>(g) Enclosure : Acoustic and weather proof enclosure with arrangement for fresh air intake for cooling of the engine and alternator, extraction , discharging hot air into the atmosphere and to meet latest noise pollution norms (CPCB norms)</p>					
2	Supply, erection, testing and commissioning of 0.5 HP Diesel Filling Pump With starter & Power & Control Cable.	1	Set			

3	Supply, erection, testing and commissioning of 25 mm UPVC Pipe including Wall Cutting, Excavation & Minor Civil Work etc as per Engineer in charge.	10	Metre			
4	Supply, erection, testing and commissioning of High Pressure 25 mm Brash Nozzle Valve.	1	Set			
5	Supply, erection, testing and commissioning of Automation base Panel (DG Set Monitoring & ON OFF Indication etc.) Siemens Make :- CPU 1214C, DC/DC/DC 1 Nos, Communications processor CP 1242-7 LTE EU - 1 Set , ANT896-4ME mobile wireless antenna for GSM (2G), UMTS (3G) and LTE(4G) Networks, -1- Nos. MFM Metre With RS485- 1 Nos, N-Connect/SMA male/ male flexible connection cable pre-assembled, Length 5 m, flexible connecting cable SCALANCE W antenna 1 Set. , Control Panel 600 w* 600 h* 300d - 1 Nos, MCB DP 4AMP For SMPS Input - 1 Nos, POWER SUPPLY 4.5AMP - 1 Nos., CIRCUIT BREAKER C60H-DC 500VDC 4A 2P C- 1 Nos, 4" Fan- 1 Nos, 4" Filter 130 X 130 - 2 Nos., Grill For 4" Fan -1 Nos, LED LIGHT - 1 nos, PVC BOX 1 PLUGE 2 SWITCH - 1 Set, with On off Switch and Control Cable.	1	Set			

6	ATS PANEL					
	<p>Supply, installation, testing and commissioning of Main panels as per drawing and specifications. Panel should be dust and vermin proof. Panel shall be fabricated from 14/ 16 SWG CRCA sheet metal duly powder coated of approved paints. Panel should be as per the specifications of ERDA/CPRI. Fabrication, Switch gear installation. Internal wiring and Test Certificate from Manufacturer to be submitted. - All MCBs must be C Type Characteristic. Panel Drawing Need to be approved by Bank's Engineer before starting work.</p> <p>Incoming feeder: 2 NOS - 250 A FP MCCB (16kA). The MCCB should have inbuilt Earth Fault & Neutral Overload Protection with Power Supply & Display Module for Metering & Fault Recording.</p> <p>Auto/Manual/Test/Off selector switch</p> <p>250A Auto transfer switch with internal wiring.</p> <p>250 AMP. 500 Volts, 3 phase 50 Hz FP Alu. bus bars of suitable length -Current ratio shall be 1 sq mm = 1.2 A.</p> <p>3 Sets of current transformers 100/5 for metering.</p> <p>Multifunction Meter With Control Wiring.</p>	1	Set			

	Phase indicator lamps phase wise. INCOMMING 1 & 2 - RYB ON OFF					
	Outgoing feeder:					
	40 A FP MCB (3 NO).					
	63 A FP MCB (3 NO).					
	40 A DP MCB (2 NO).					
7	Supply and Installing of 100A FP MCCB (16KA) (1 No.) with U V Protection + Shunt Trip Protection (Ics =100% Icu., confirmed to IS / IEC 60947 -2 adjustable Ir rating from 0.7 to 1) Unit M. S. compartment enclosure IP65 with hinged door & locking arrangement duly fabricated from 18 SWG sheet metal box duly painted with one coat of red-oxide paint and two coats of approved enamel paints with 100A OPEN TYPE MCCB UNIT with Phase indicator lamps phase wise , control fuses & wooden back complete. THIS WILL BE INSTALLED NEAR MAIN Meter	1	Nos			
8	63 Amp FP Auto change Over Switch With Enclosure Supply & Fixing.	1	Nos			
9	32 Amp DP Auto Change Over Switch With Enclosure Supply & Fixing.	1	Nos			
10	Supply, Laying, installation, testing and commissioning of following sizes of PVC insulated PVC sheathed copper / aluminium conductor armoured cable to be laying in existing cable trench or to be laid in existing pipes of with necessary clamps, spacers with cleating on wall ceiling etc. complete to the satisfaction of EIC. (LENTH TO BE VERIFY AT SITE)					
a)	3.5 x 70 Sq.mm Alu. Arm Cable (For DG To ATS PANEL)	65	Metre			

b)	4C x 10 sq mm Cu Arm Cable (For Water Pump To ATS PANEL)	38	Metre			
c)	4C x 6 sq mm Cu Arm Cable (For Lift DB To ATS PANEL, Ats Panel to External lighting)	55	Metre			
d)	4C x 4 sq mm Cu Arm Cable (For Parking DB To ATS PANEL)	65	Metre			
e)	4C x 2.5 sq mm Cu Arm Cable (For DG Battery power cable)	55	Metre			
F)	6C x 1.5 sq mm Cu Arm Cable (For DG Controlling)	65	Metre			
8	End termination of following PVC insulated armoured cables including supply and fixing of brass single compression type cable glands and crimping type aluminium / copper lugs suitable for terminations of armoured cables of following overall diameters,					
a)	3.5 x 70 Sq.mm Alu. Arm Cable	2	Set			
b)	4C x 10 sq mm Cu Arm Cable	4	Set			
c)	4C x 6 sq mm Cu Arm Cable	4	Set			
d)	4C x 4 sq mm Cu Arm Cable	4	Set			
e)	4C x 2.5 sq mm Cu Arm Cable	4	Set			

F)	6C x 1.5 sq mm Cu Arm Cable	2	Set			
9	Making trench in soft soil of suitable width of 90 cms deep for laying cable or locating the fault all over the run and backfilling the same and making the surface as normal ground.	45	Metre			
10	Making trench in Hard Murrum / Tar Road of suitable width of 90 cms or required depth for laying any size of cable or locating the fault all over the run and back filling the same and making the surface as normal ground.	12	Metre			
11	Mains with ISI marked, 1.5KV grade electrolyte multi stranded, annealed copper conductor with heat resistant PVC insulated conforms to IS 694, IEC - 227 erected in PVC pipe of following size with required size of copper lugs, nuts and bolts if required.					
	(i) One wire 50.00 sq. mm	45	Metre			
12	Supplying & erecting of MAINTENANCE FREE EARTHING Station -- Supplying & erecting stations for equipment earthing as shown and specified in drawing for equipment complete with: Earth electrode/Rod - High-grade solid steel rods molecularly bonded with 99.9% pure electrolytic copper with minimum coating thickness of 250 microns should be used as earth electrode. The rods must be UL listed as well as tested according to IEC62561-2 and comply to the requirements of IEC 60364-5-54. all should be CPRI and MSME tested product. with Earth enhancement compound – All earth enhancement compound should comply IEC 62561-7 and should be tested for Corrosion test, determination of resistivity test and toxicity test analysed as per EPA 1311(TCLP), with Universal clamp – It should be of material SS 304 grade including Hex Head Screw for	5	Nos			

	attaching flat conductors and it should comply as per IEC 62561-7, Earth Inspection Chamber – It should be of poly ethylene material hard drawing plastic suitable for heavy load upto 5000kg (49kN) with openable lid and required space for inspection of resistance of rod. Rod should also withstand short circuit current as per below 17mm rod – 20kA RMS which possess excellent electrical conductivity with high charge dissipation. Back filling Compound :1 no. Bag of 25 Kg.					
13	25 x 6 mm G.I. Strip - with Green Insulation Supply & Fixing.	55	Metre			
14	8 SWG CU. Wire with 20 mm dia. PVC rigid conduit duly cleated / concealed / buried in floor etc. complete.	55	Metre			
15	Less Buyback of Existing old Diesel Generator Set					
Part B Total	TOTAL COST OF WORK Rs.					

Note: In case of any discrepancy, rates quoted in words will be considered.

Part – C – Comprehensive Annual Maintenance Contract for Diesel Generator Set installed in Head Office, Mandvi and Sainath Plaza, Wing-B, Vadodara

Comprehensive Annual Maintenance Contract

S.No	Work / Job	Rate Per Annum for 160 KVA (Rs)	Per Annum for 125 KVA(Rs)
1	Total CAMC cost for the First Year after Defect Liability Period	Rate in Figures: Rate in Words:	Rate in Figures: Rate in Words:
2	Total CAMC cost for the Second Year Defect Liability Period	Rate in Figures: Rate in Words:	Rate in Figures: Rate in Words:
3	Total CAMC cost for the Third Year Defect Liability Period	Rate in Figures: Rate in Words:	Rate in Figures: Rate in Words:
4	TOTAL CAMC COST FOR 3 years after Defect Liability Period of one year		
Part C Total	Total CAMC Cost for 160 KVA & 125 KVA DG Set for 3 years after Defect Liability Period of one year		

Note: In case of any discrepancy, rate quoted in words will be considered.

Summary

Particulars	Amount (Rs)
Part A Total	
Part B Total	
Part C Total	
Grand Total (Part A + Part B + Part C)	

Seal :

Date:

Place:

Name & Signature of the Bidder

Seal & Signature of Bidder