

राष्ट्रीय कोशिका विज्ञान केंद्र
NATIONAL CENTRE FOR CELL SCIENCE
(जैवप्रौद्योगिकी विभाग, भारत सरकार की स्वायत्त संस्था/
An Autonomous Institution of the Department of Biotechnology, Govt. of India)
सावित्रीबाई फुले पुणे विश्वविद्यालय परिसर, गणेशखिंड, पुणे-411007
Savitribai Phule Pune University Campus, Ganeshkhind Pune -411007

भाग II/ PART II- वाणिज्यिक/मूल्य बोली/ COMMERCIAL / PRICE BID

**SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF
380KVA DG SET WITH AMF PANEL AT JIDNYASA BLDG., KOTHRUD, PUNE**



प्रस्तुत करने की नियत तारीख/DUE DATE FOR SUBMISSION: 21/11/2023 @ 15 HRS

प्रेषित करने के लिए पता/ TO BE SUBMITTED TO:

निदेशक/The Director

राष्ट्रीय कोशिका विज्ञान केंद्र/National Centre For Cell Science

सावित्रीबाई फुले पुणे विश्वविद्यालय परिसर/ Savitribai Phule Pune University Campus,
गणेशखिंड/ Ganeshkhind, पुणे/Pune 411007 (महाराष्ट्र, भारत/Maharashtra, India)

बिडर का नाम एवं पता/NAME AND ADDRESS OF BIDDER:_____

SEAL & SIGN OF THE BIDDER

PART-I

BILL OF QUANTITY

SITC OF 380KVA DG SET AT JIDNYASA BLDG., KOTHRUD, PUNE

SL. No	DESCRIPTION	Qty	Unit	UNIT RATE	TOTAL AMOUNT
1.0	Supply & Installation, Testing & Commissioning (SITC) of DG set with accessories.				
1.1	Supplying, erecting, testing and commissioning of diesel generating set with alternator of 380 kVA output continuous rating, 3 Phase, 415 V, 50c/s 0.8 p. f. A.C supply, a totally enclosed air cooled / liquid cooled multi-cylinder diesel engine developing suitable BHP at 1500 rpm with 10% overload for 1 hour in 12 hours, along with standard accessories, self-excited, self-regulated, screen protected alternator with static excitation system running at 1500 RPM as per IS 4722-2001 with voltage regulation +/- 5 %, with performance class G2 and maximum fuel consumption 65.5 Ltr/hr @75% loading. Both the engine and alternator direct coupled on a common fabricated steel base frame and mounted on anti-vibrating pads with standard control panel comprising meters, switchgears, indicators connected with suitable wires/cables, the complete set enclosed in composite Acoustic enclosure as fully assembled integral unit made of 16 SWG CRCA Sheet, sound absorbing material to restrict sound level up to 75 dB at 1.0 m, provided with first filling of oil & diesel not less than 450 Ltr etc. on Provided M20 Grade CC Foundation and obtaining necessary approval from Electrical Inspector as per specification no. GEN-DG	1	SET	3533442	3533442
1.2	Adopter box with bus bars suitable for cable termination with 2R of 3.5C X 300 Sq mm Aluminium armoured power cables. Adopter box made out of CRCA sheet steel of minimum 2 mm thick with necessary MS angle or channel stiffeners suitable to mount on alternator terminal housing. Adopter box shall be with undrilled detachable gland plate of minimum 3 mm thick. Shall be of dust & vermin proof provided with neoprene gaskets with necessary hardwares.	1	Nos	35400	35400
2.0	Design, Supply & Installation, Testing, Commissioning and documentation of EXHAUST ROUTING TO ATMOSPHERE FROM ENGINE - EXHAUST SYSTEM : (Pipe sizes given are tentative and to be confirmed by supplier based on DG set design and requirements)				
2.1	Supply & Installation, Testing & Commissioning (SITC) of following suitable size exhaust pipe for 380kVA DG Sets, of MS ERW 'B' class with Al. cladding.				
2.1.1	6" MS 5mm thick ERW B Class Pipe	30	Mtr	4726	141777
2.1.2	6" MS 5mm thick Bend	4	Nos	4425	17700
2.1.3	6" SS Flexible Bellows with Table D Flanges, Gaskets and Hardwares	1	Nos	19765	19765
2.1.4	Supply & Installation, Testing & Commissioning (SITC) of Insulation materials 50 MM thick glass wool and cladding of 24 gauge Aluminium sheet for the above pipe & Bends.	34	Mtr	1546	52557
2.1.5	Supply & Installation, Testing & Commissioning (SITC) of Silencer and Insulation materials 50 MM thick glass wool and cladding of 24 gauge Aluminium sheet.	1	SET	18290	18290

SL. No	DESCRIPTION	Qty	Unit	UNIT RATE	TOTAL AMOUNT
3.0	EXHAUST PIPE SUPPORT				
3.1	Supply and Installation of MS flats / angle iron, Self supports for various purpose like exhaust pipes, Silencers, bends, cable tray supports etc. with necessary accessories, base plate, stands, various sizes including cutting, welding, grinding, high tension foundation bolts with double nuts for foundation, Structure joints it will be bolted with 4.6 Grade GI Coated MS bolts, fixing accessories and one coat of primer & two coats of enamel paints, minor civil works etc. as required. Note: 1) Chimney exhaust pipe should be supported from building (wall). 2)The flat / angle iron weight will be arrived on the basis of theoretical calculation only. 3) Rate shall include scaffolding rental cost, if required. 4) Height of chimney and insulation should as per CPCB norms. 5) Chimney to be provided with rain water protection cowl.	2000	Kgs	165	330400
3.2	Supply, Installation, Testing and Commissioning of conventional type Lightning protection System at the top of stack with Air termination 8 mm Dia Alluminium 1mtrs Length as per IEC 62305 & UL certified with Lightning strike counter and suitable accessories for holder & connectors, .	1	set	31860	31860
3.3	Supply, Installation, Testing and Commissioning of weather proof / corrosion resistant 2x12W twin LED aviation lamp at top of the Chimney with timer auto ON / OFF photo cell controller, connecting cables upto aviation lamp, control switch etc	1	set	31860	31860
	Note: DG set & Exhaust pipe structural civil foundation details need to be provided by DG Vendor. Civil foundation shall be in Client scope.				
4.0	L.T. CABLES & LT CABLE END TERMINATIONS				
4.1	CABLE SUPPLY				
	Supply, testing and commissioning of 1100V grade, XLPE insulated armoured / unarmoured Aluminium / Copper conductor cable as per technical specifications. The cable shall be laid in existing trenches / cable trays as required with rate include of cable route markers, name plate. The cable shall be clamped at regular intervals to the supports in trench or on cable trays or brick wall using MS clamps, cable ties and fasteners.				
4.1.1	2C 2.5Sqmm LT XLPE insulated copper conductor FR-LSH outer sheathed Armoured cable (From External supply of power to enclosure Lighting).	40	Mtrs	307	12272
4.1.2	2C 4Sqmm LT XLPE insulated copper conductor FR-LSH outer sheathed Armoured cable (For Battery Charger).	70	Mtrs.	466	32627
4.1.3	4C 2.5Sqmm LT XLPE insulated copper conductor FR-LSH outer sheathed Armoured cable (For Bus supply & Master first start)	70	Mtrs.	466	32627
4.1.4	12C 2.5Sqmm LT XLPE insulated copper conductor FR-LSH outer sheathed Armoured cable (For Start& Stop Annunciation, MCCB Close Trip & Status)	70	Mtrs	1180	82600

SL. No	DESCRIPTION	Qty	Unit	UNIT RATE	TOTAL AMOUNT
4.2	CABLE LAYING				
4.2.1	Laying, testing, commissioning & fixing of one number Armoured / Unarmoured PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray / existing trenches as required. With rate include of cable route markers, name plate, the cable shall be clamped at regular intervals to the supports in trench or on cable trays or civil wall using MS clamps, cable ties and fasteners, meggering values & submitting reports of tests as per tender technical specifications.				
4.2.2	Upto 35 sq. mm (clamped with 1 mm thick saddle)	250	Mtrs	48	11,962
4.3	CABLE END TERMINATIONS				
	Supply and installation of 1.1kv grade LT power cable end termination for below listed XLPE cable with Copper/Aluminium lugs, heat shrinkable sleeves on long ends, brass cable glands , tapping, crimping, name plate etc. The work includes testing & commissioning of cables, meggering values & submitting reports of tests, cable route markers and name plate.				
4.3.1	Supplying, making & erecting single compression type brass cable glands and tapping, crimping for 2 to 4 core 2.5 sq mm /2 to 4 core 4 sq mm /2 core 6 sq mm for XLPE armoured cable as per specification No. CB-GL	6	Nos.	80	481
4.3.2	12C 2.5Sqmm LT XLPE insulated copper conductor FR-LSH outer sheathed Armoured cable (For Start& Stop Annunciation, ACB Close Trip & Status)	2	Nos.	407	814
5.0	EARTHING				
51.0	DG NEUTRAL EARTHING				
5.1.1	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal / coke and salt as required as per IS 3043.	2	Nos	14,714	29,428
5.1.2	Supply & laying of 50mmx6mm Copper Strip with Green PVC sleeves, insulators, mounting clamps and necessary bolts and nuts.	30	Mtrs	4248	127440
5.1.3	Supply & laying of 6 SWG copper wire for cable gland earthing.	10	Mtrs	207	2065
5.1.4	300(D)x100(W)mm Digging, concrete slab breaking & refilling of underground trenches for earthing strips.	10	Mtrs	2006	20060
5.2	DG & MS STRUCTURE & LIGHTNING ARRESTOR BODY EARTHING				
5.2.1	Supply, Installation & Testing of Earthing with G.I earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal / code and salt as required as per IS 3043.	2	Nos	7,945	15,890
5.2.2	Supply & laying of 50mmx6mm GI Strip with paint, mounting clamps and necessary bolts and nuts.	50	Mtrs	649	32450
5.2.3	Supply & laying of 25mmx6mm Aluminium Strip with mounting clamps and necessary bolts and nuts. Rate shall be include aluminium alloy end terminal between strip & down conductor (Air terminal). (For Lightning arrestor)	20	Mtrs	342	6844
5.2.4	300(D)x100(W)mm Digging, concrete slab breaking & refilling of underground trenches for earthing strips.	10	Mtrs	2006	20060

SL. No	DESCRIPTION	Qty	Unit	UNIT RATE	TOTAL AMOUNT
6.0	CABLE TRAY				
6.1	Supplying and installing of following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders at every 1.2 mtr including bolts & nuts, painting suspenders etc as required. cable tray shall be different widths and delivered in standard lengths along with Coupler plates and requisite number of hardwires, at different levels along pipe rack/open area/ readymade cable trenches/civil wall, etc , Gas cutting of cable trays at site is not permitted. Cable tray shall be as per tender technical specifications.				
6.2	100 mm width X 50 mm depth X 1.6 mm thickness	10	mtr	577	5,774
6.3	150 mm width X 50 mm depth X 1.6 mm thickness	10	mtr	642	6,422
6.4	300 mm width X 50 mm depth X 1.6 mm thickness	40	mtr	826	33,047
7.0	SAFETY & MISCELLENOUS ITEMS				
7.1	Supply and fixing of 5 Kg capacity CO2 type fire extinguisher	1	lot	10561	10561
7.2	Supply and fixing of shock treatment chart in three language (English & Local Language)	1	Nos	2360	2360
7.3	Supply and laying of Rubber mat of size 1000mmx2000mmx2.5mm thick of 11K V grade as per IS 15652 or equivalent.	1	Nos	2360	2360
7.4	Supply and fixing of 1200mm X 600mm size 22 gauge GI sheet board for display the name plate details of DG set	1	Nos	2360	2360
7.5	Supply, handing over of Fuel unloading hand pump with 10mtrs PVC hose	1	Nos	8850	8850
8	DG Foundation	1	Job	1,77,000	1,77,000
	RCC Foundation M25 Grade suitable for 380KVA DG set having approx. foundation size 6.3x3mtr or as per DG MFG standards, min.150-200mm above ground level to mount the DG set, using steel bar, Excavation, refilling with stone & dubber, coloring, complete with all necessary and masonry work etc required as per DG MFG standards. Complete job. Foundation drawing should be get it approves from NCCS & consultant before start of work.				
TOTAL PROJECT COST					4889406

**राष्ट्रीय कोशिका विज्ञान केंद्र
NATIONAL CENTRE FOR CELL SCIENCE**

NIT No. **NCCS/MAINT/DG/354E/2023**

Name of Work: - SITC OF 380KVA DG SET AT JIDNYASA BLDG., KOTHRUD, PUNE-411038

PRICE BID

Name of the Contractor: M/s. _____

SNo	Name of component	Total Project Cost	Percentage above or below the Total Project Cost	% in Figure	Total Amount
1	SITC OF 380KVA DG SET AT JIDNYASA BLDG., KOTHRUD, PUNE-411038	Rs.48,89,406			
TOTAL AMOUNT (PART I) IN WORDS					

PART-II
CAMC / AMC

PART II-A

ANNEXURE "A" : Comprehensive Annual Maintenance Contract (CAMC) For 380 KVA DG Set after completion of two year Defect Liability Period.

SR. NO.	YEAR	CAMC CHARGES		
		AMOUNT (RS.)	GST	TOTAL AMOUNT (RS.)
1	1 ST YEAR			
2	2 ND YEAR			
3	3 RD YEAR			
4	4 TH YEAR			
5	5 TH YEAR			
TOTAL AMOUNT (II-A) RS.				
(TOTAL AMOUNT RUPEES)

TERMS AND CONDITIONS OF THE SERVICE CONTRACT (CAMC):

1. During the service contract period, the firm shall provide twelve preventive maintenance visits per year and attend to all emergent and break-down calls as and when required.
2. The service contract charges should be quoted only for services, parts, spares, accessories etc which shall be arranged by the Contractor at its own cost. It also includes B Check service once in year which includes replacement of filters, lub oil etc as per OEM standard.
3. Response time should be 2 Hrs from the time of complaint given to your firm for all days and rectify the problems on the same day. In case of major breakdown, it should be rectify within 24 hrs. In case of delay in attending and rectifying the fault within 2 days the contract period will be extended by one week for the delay of each day proportionally.
4. The firm shall try to repair the equipment at NCCS. However, the equipment/accessories/parts may be taken to their workshop, on their own expenses if in case it is not possible to repair the same at NCCS, the firm shall take the entire responsibility for the safe custody and transportation of the equipment taken out for repairs till this is handed over to NCCS after repair. Any loss of equipment or its accessories on account of theft, fire or any such reasons shall be the sole risk and responsibility of the firm who will compensate the NCCS for such losses at landing cost (at the time of purchase)/ present landing cost of the damaged/lost equipment/part including accessories whichever is higher.
5. All service contract charges will be invoiced on every quarter on satisfactory completion of period of maintenance. The payment of the invoice will be made after verification of service invoice satisfactorily by user within 30 days of the date of submission of the invoice.
6. No price revision will be accepted by the NCCS during the entire tenure of the service contract agreement.

PART II-B

ANNEXURE “B”: Non-Comprehensive Annual Maintenance Contract (AMC) for 380 KVA DG Set after completion of two year Defect Liability Period.

SR. NO.	YEAR	AMC CHARGES		
		AMOUNT (RS.)	GST	TOTAL AMOUNT (RS.)
1	1 ST YEAR			
2	2 ND YEAR			
3	3 RD YEAR			
4	4 TH YEAR			
5	5 TH YEAR			
TOTAL AMOUNT (II-B) RS.				

(TOTAL AMOUNT RUPEES)

Note: The total amount of AMC will be taken into account while evaluating the bid.

TERMS AND CONDITIONS OF THE SERVICE CONTRACT (AMC):

1. During the service contract period, the firm shall provide twelve preventive maintenance visits per year and attend to all emergent and break-down calls as and when required.
2. The service contract charges should be quoted only for services etc. and should not include the cost of any parts/components which shall be arranged by the NCCS.
3. Response time should be 2 Hrs from the time of complaint given to your firm for all days and rectify the problems on the same day. In case of major breakdown, it should be rectify within 24 hrs. In case of delay in attending and rectifying the fault within 2 days inspite of required spares are made available by NCCS, the contract period will be extended by one week for the delay of each day proportionally.
4. The replaced parts shall remain the property of the NCCS.
5. The firm shall try to repair the equipment at NCCS. However, the equipment/accessories/parts may be taken to their workshop, on their own expenses if in case it is not possible to repair the same at NCCS, the firm shall take the entire responsibility for the safe custody and transportation of the equipment taken out for repairs till this is handed over to NCCS after repair. Any loss of equipment or its accessories on account of theft, fire or any such reasons shall be the sole risk and responsibility of the firm who will compensate the NCCS for such losses at landing cost (at the time of purchase)/ present landing cost of the damaged/lost equipment/part including accessories whichever is higher.
6. During the service contract period the parts/components that may be required for replacement shall made available by the NCCS. However, the contractor shall provide list of spares /parts well in advance to enable NCCS to procure and keep these spares in stock.
7. All service contract charges will be invoiced on every quarter on satisfactory completion of period of maintenance. The payment of the invoice will be made after verification of service invoice satisfactorily by user within 30 days of the date of submission of the invoice.
8. No price revision will be accepted by the Institute during the entire tenure of the service contract agreement.

ABSTRACT

SR. NO.	PARTICULAR OF ITEMS	AMOUNT
1	PART I- BILL OF QUANTITY FOR SITC OF 380KVA DG SET AT JOPASNA BLDG., KOTHRUD, PUNE	
2	PAPT II-B NON-COMPREHENSIVE AMC FOR 380 KVA DG SET AFTER COMPLETION OF TWO YEAR DEFECT LIABILITY PERIOD	
TOTAL AMOUNT (1+2) RS.		

(TOTAL AMOUNT IN RUPEES)