

भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान पुणे INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH (IISER), PUNE Main Building, IISER Pune Campus Dr. Homi Bhabha Road, Pune : 411 008

Tender for SITC of 2x1000 KVA, 11KV/415 V substation, sports lighting and other miscellaneous electrical works at IISER Pune. NIT Number: 8/IISER/PUNE/2015-16

Date of Issue: 09.03.16

MINUTES OF PRE-BID MEETING

Prebid Meeting Held at Office of IISER-Pune on 08 Mar 2016 at 11.00am

IISER

- 1. Er. Y. S. Rajput, SE IISER PUNE
- 2. Er. Varsha Housing, EE (Ele)

Prebid Meeting held in presence of above said members and contractors representatives for "Tender for SITC of 2x1000 KVA, 11KV/415 V substation, sports lighting and other miscellaneous electrical works at IISER Pune. NIT Number: 8/IISER/PUNE/2015-16 "conducted by IISER Pune. The following points were discussed and clarified for bidders further action.

Sr No	Points discussed	IISER Clarification
1	Date of Submission of Tender	No change in date and time of submission of tender.
2	Queries of Ridders	All Queries raised by bidder till 08.03.2016 by E-mail and fax including hard copies handedover during prebid meeting were clarified. Hard copies of clarifications is enclosed and shall form a part of tender document. (35 Pages)

The original tender document and conditions already issued to agency stands modified to the extent modifications defined in above MOM & shall form part of tender document. The bidders are requested to submit the MOM & all its enclosers in original along with the tender document on due date of submission of tender. The bidders are further requested to take note of above modifications & quote their rates accordingly. Soft copies of MOM and its enclosure already sent to the intending bidders E-Mail ID's.

Superintending Engineer IISER PUNE



भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान पुणे INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH (IISER), PUNE

NAME OF WORK: Tender for SITC of 2x1000 KVA, 11KV/415 V substation, sports lighting and other miscellaneous electrical works at IISER Pune. NIT Number: 8/IISER/PUNE/2015-16

Clarification of Queries of Bidders in pre-bid meeting held at 11.00 AM on 08-Mar-2016 at IISER Pune.

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
			Transformer		
			Tap Changer - On Load Tap Changer of +5% to -15% @ 1.5% on 11KV	As per standared +5% to 15 % @ 1.25% on 11 KV pls clear	For On load tap changer, tapping range of +5% to -15% @ 1.25% shall be accepted.
			As per Specification temperature rise is 40 /50	as per BOQ its is 50/55	Temperature rise shall be 50/55 as per BOQ
			Transformer we should quote as per new IS1180 or ECBC losses	Pls clear	Transformer shall be Provided as per IS 1180 and losses shall confirm to IS 1180
			Impedance as per specification is 6.25 % (IS ToI) and as per BOQ its is 5 % (IS ToI	Pls clear	Impedence shall be 5% as per BOQ.
			As per Specification its mentioned as explosion vent / PRV and in BOQ its mentioned as explosion vent	Pls clear	Explosion vent or PRV shall be accepted.
			Highest System voltage will be 12 KV as this 11 KV transformer in specification it is mentioned as 24 KV	Pls clear	Highest System voltage shall be 12 KV
			In specification termination mentioned as Cable box / Busduct and in BOQ it is mentioned as Cable Box / cable box . Please clarify	Pls clear	Termination shall be for HV-Cable box, for LV Cable box.

r. o.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
			will provided with Dial type oil temperature indicator and Dial Type winding temperature . As Marshaling box is there . Stem type – Not applicable	Pls clear	Oil temperature indicator and Winding temperature indicator shall be Dial type
			HT cable		
				you have mention all cable insulation XLPE or PVC sheathed . which insulation we should quote.?	Cable insulation shall be XLPE
			HT CABLE END TERMINATION (Indoor)		
			HT Termination You have given only Raychem make	pls give us one more make - we suggest 3M.pls confirm	Make for HT termination shall be Raychem, 3M
			Cricket field and sports lighting		

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
140.			Please give us lux level for high masts	mention lux level	Desirable lux levels shall be as per standards. Boq is item wise and bidders are requested to quote accordingly.
+			CLOSED CIRCUIT TELEVISION SYSTEM		
			You have given total 130 nos camera in Boq but for that camera required power supply unit & you have given only 30 nos power supply unit in item no 41	Total Power supply required 130 Nos pls confirm	BOQ item No 41 quantity shall stand modified to 80 Nos instead of 30 nos. Bidders are requested to make change in the BOQ quantity and quote accordingly.
		BOQ Sr. No. 2.1	Transformer	As per Specification temperature rise is 40 /50 °C as per BOQ its is 50/55 °C ,Please clarify .	Temperature rise shall be 50/55 i.e. as per BOQ
				Impedance as per specification is 6.25 % (IS Tol) and as per BOQ its is 5 % (IS Tol) Please clarify .	Impedence shall be 5%
				As per Specification its mentioned as explosion vent / PRV and in BOQ its mentioned as explosion vent . Please clarify .	Explosion vent or PRV shall be accepted.
				OLTC range mentioned in specification and BOQ (+ 5% to -15 % @ 1.5 %) -Can we consider with 5 to -15 % @ 1.25 (16 Steps OLTC)	For On load tap changer, tapping range of +5% to -15%@ 1.25% shall be accepted.

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
				Highest System voltage will be 12 KV as this is 11 KV transformer in specification it is mentioned as 24 KV	Highest System voltage shall be 12 KV.
					Oil temperature indicator and Winding temperature indicator shall be Dial type
				In specification termination mentioned as Cable box / Busduct and in BOQ it is mentioned as Cable Box / cable box . Please clarify	Termination shall be for HV-Cable box, for LV Cable box
				,	On LV side 3.5 core x 3 runs of x 400 sq mm PVC armoured cable shall be terminated.
		BOQ Sr. No. 28	Cricket field and sports lighting	Please provide contact details of following vendors: Lysaght /Abacus	Contact details are available on the net.
		BOQ Sr. No.25	Panels	If There is discrepancy in the description of BOQ and SLD than what to follow .which will supersede .	BOQ shall supersede the SLD.
				BOQ calls for all ACB's shall have RS485 port with gateway unit for communication. Request you to kindly send us what type of gateway communication required for the ACB's.	All ACBs shall have RS 485 port .

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
NO.				SLD & BOQ for Main power panel are not matching so can we quote as per BOQ only. Also can we combine both boq (Main power panel & 1 & 2) & quoted one single panel.(Main power Panel), because in SLD it is shown a single panel.	Modified SLD attached with MOM. Quote for Main Power Panel as per BOQ.
				In capacitor panel MCCB, contactor are not matching with capacitor banks mentioned in boq, so can we select MCCB & contactor for all banks as per electrical standard.	Quantity for MCCB shall be read as 160 TP MCCB- 7 nos, 63 A TP MCCB 2 nos 32 A TP MCCB - 8 nos. Bidder shall make note of it and quote accordingly. BOQ iten No 25.1.4 shall stand modified accordingly and contractors are requested to quote accordingly.
		BOQ Sr. No.38	CLOSED CIRCUIT TELEVISION SYSTEM	Please share detailed technical specification for it.Kindly share the Schematic for the CCTV System. Kindly share the Project details as in the building is for what purpose, where will the cameras be placed and the total no. of floors in the Building over which the cameras are to be placed.	Technical specifications, Model and make are already specified in the BOQ items. Being item rate tender, agency to quote as per BOQ items.
				All the Cameras are IP Cameras, who have options of both PoE(Power over Ethernet) and Normal Power Supply. Kindly explain the reason for only 30 cameras with Power Supply. How will the rest of Cameras be powered, apart from PTZ Cameras?? And also specify the Power requirements. Please clarify.	Ip cameras shall be powered on POE. Dome cameras shall be powered by separate power supply units. BOQ item N 41 quantity shall stand modified to 80 Nos instead of 30 nos. Bidders are requested to make change in the BOQ quantity and quote accordingly.

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
NO.				If for the PTZ Cameras the poles are required, kindly highlight the length of the Poles and Technical Specifications for them as well.	PTZ camera shall be installed on existing poles or on existing buildings. Bidders to quote as per BOQ item.
				For the NVR, kindly specify the no. of days for which the recording has to be done and at what frames per seconds, please specify. Also mention the CIF value for the recording.	Hard disk of 4 TB shall be provided as per BOQ item No 43. Bidders to quote accordingly.
			Make List	Makes of some of the items are mentioned in BOQ however in the make list they are missing. Kindly include complete make on the approved make list.	Makes specified in the tender documents other than approved make list shall be treated as additional approved makes.
				Can we consider the following additional makes	
				LT Panels - Sterling Generators	LT panels shall be got manufacture red from any CPRI approved panel manufacturer in addition to makes given in the list of approved makes given in the tender document.
				LT Cables - KEI/RPG	Makes for LT cables shall be as per make list given in Vol I of tender documents Polycab / Finolex / RR Kable
				Cable Trays - Shruti Industries/ Elcon	Makes for Cables trays shall be as per make list given in Vol I of tender documen Storrax / Skaber / Profab

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
NO.				Transformer - Raychem	Approved Makes for Transformer - shall stands modified to Kirloskar / Voltamp / Reychem
				DG Set - Sterling Generator (Engine -Perkins ,Alternator -Leroy Somer)	Sterling Generator (Engine -Perkins , Alternator -Leroy Somer) with specification matching to the BOQ item No 22.1 is approved as an additional make for DG set. Bidders are requested to quote accordigly.
				Capacitor - Subodhan	Makes for Capacitors stands modified as L&T / Siemens / Subodhan / Prabodhan
		COMMERCIA L QUERIES			
			Payment Terms	Please Confirm payment terms percentage wise.	Payment terms shall be as specified in tender documents.
				We request following payment terms	
				For Supply :	No change in tender conditions.
				20% Advance against ABG	_
				70% Against Material at site.	
				5% Against Pro Rate Installation.	1
				5% Against Commissioning.	1
				For Installation :	

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
				20% Advance against ABG	
				70% Against Installation	
				10% Against Commissioning.	_
			Tax Benefit	Is the project having any Tax Benefit . If yes, kindly highlight the same.	No tax benefit. Quote as per terms and conditions of the tender document.
		DC Overies			
		DG Queries			
		22.1	Supplying, installing, testing & commissioning Diesel Generator set of 750KVA capacity of Kirloskar Green make Model KG1-750WS with detailed specification as given below or equivalent of Cummins/Volvo Penta make model with specifications similar to Kirloskar Green with following accessories in an acoustic enclosure sound proof canopy CPCB approved.	We will provided 750KVA DG SET with Perkins Make Engine or Leroy Somer Make Alternator.	Sterling Generator (Engine -Perkins , Alternator -Leroy Somer) with specificatio matching to the BOQ item No 22.1 is approved as an additional make for DG s Bidders are requested to quote accordigly

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
NO.		22.1		Our 750KVA DG Set Has 804 BHP - (Gross Engine Power Output)	Engine -Perkins with specification matching to the BOQ item No 22.1 is approved as an additional make.
				Ratings in accordance with ISO 8528, ISO 3046, IEC 60034, BS 5000.Accessories shown many not be part of standard Generating Set	Quote as per BOQ items.
		22.1	ALTERNATOR:		
			KIRLOSKAR GREEN /STAMFORD/ CATERPILLAR standard Design Alternator rated at 750KVA,0.8 PF (Lag) 415V, 50HZ, at 1500RPM, Class H insulation, IP 23 Enclosure, self excited and self regulated with voltage regulation of + 1% of rated voltage from no load to full load.	We will provided 775KVA Leroy Somer make Alternator	Approved.

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
		22.1	FUEL TANK: Fuel tank with manufacturers specifications for minimum 8 hours running capacity with level indicator, fuel inlet and outlets, air vent, drain plug, inlet arrangement for direct filling and set of Fuel Hoses.	We will provided 990 Liters Day Tank, made in 2mm thick CRCA Sheet. It has suitable for 7.2 hours @75% load or 5.83 hours @100% Load. It has our STD scope of supply.	
		22.1	BATTERY:Maintenance free pre -charged batteries 12Volts ,180AH with leads and terminals Exide/Tata Green make2nos.	We will provided 2x12Volt 150AH Capacity Lead Acid Batteries. Maintenance free batteries has not suitable for DG Cranking. It has our STD scope of supply.	Lead Acid Batteries of 2 x 12 V 180 AH shall be acceptable. Bidders are requested to take note of it and quote accordingly.

Design, supply, installation, testing and commissioning of minimum 200 mm inner dia , MS exhaust piping, heavy duty class C MS pipe as per IS code, complete with all accessories such as bends flanges, welding, flexible connections at a suitable distance etc and supporting arrangements with MS structure, stay wire ropes, anchor bolts, to required height as per cych norms complete as per direction of Engineer in charge. Rate shall be inclusive of cost of all materials, labour and required T & P and taxes etc as regd. Structural design to be got approved from Engineer in charge before taking up work at site. Rate shall be inclusive of the cost of all the materials, labour, structural design, supporting structure, foundation, wire ropes, painting of steel work, required approvals from the MPCB etc. complete job and nothing extra shall be payable. Finished length of 200 mm dia pipe fixed at site shall be measured for payment.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
rock wool having 150 kg/m3 density , insulation with Aluminum Cladding, density of cladding with 26 gauge aluminium sheet all around the exhaust pipe complete as per		23	commissioning of minimum 200 mm inner dia , MS exhaust piping, heavy duty class C MS pipe as per IS code, complete with all accessories such as bends flanges, welding, flexible connections at a suitable distance etc and supporting arrangements with MS structure, stay wire ropes, anchor bolts, to required height as per cpcb norms complete as per direction of Engineer in charge. Rate shall be inclusive of cost of all materials, labour and required T & P and taxes etc as reqd. Structural design to be got approved from Engineer in charge before taking up work at site. Rate shall be inclusive of the cost of all the materials, labour, structural design, supporting structure, foundation, wire ropes, painting of steel work, required approvals from the MPCB etc. complete job and nothing extra shall be payable. Finished length of 200 mm dia pipe fixed at site shall	for exhaust piping. As per CPCB Norms Height of exhaust pipe is 15mtr/ per DG Set for separate structure or 6mtr above building height. We will quote exhaust pipe qty as per given in BOQ. Billing will be done as per measurement only.	
		24	rock wool having 150 kg/m3 density, cladding with 26 gauge aluminium sheet all around the exhaust pipe complete as per	insulation with Aluminum Cladding, density of	No change in tender specifications.

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
10.		25.1.1	SYNCHRONISING DG POWER CONTROL PANEL - (Location @ SERVICE BLOCK I)	Metering, protection relay or Annunciations, ,has in built in our controller. Hence we will provide Metering, protection relay or Annunciations separately.	No change. Quote as per BOQ items.
			METERS - 2 Sets:		
			ANNUNCIATION:		
			AUTOMATION:		
	TECHNICAL SPECIFICAT	ION.			
		2.0 Commercial Conditions	2.3.1. Construction of suitable cement concrete foundation as per manufacturer's recommendation	We will provided only foundation drawing of DG Set. Any Civil work not our scope of supply.	Civil work is included in BOQ and shall be paid accordingly.
		2.0 Commercial Conditions	2.3.8 Fuel, lube oil , and load, etc. required for testing at factory and also for testing and commissioning at site.	Site Testing will be done on available plant load. for site testing load & fuel in client scope.	For DG set on site testing Load and fuel shall be arranged by Bidder. Fuel reqd. for testing is in Bidder's scope. Bidder shall quote accordingly.
		2.0 Commercial Conditions		We will provide liaising work for Electrical inspector or PWD approval. Other than any approval in client scope.	Liasoning with Electrical Inspector, State Electricity Board & Central Pollution Control Board, required for commissioning DG seshall be done by the Bidder.
		2.0 Commercial Conditions	2.6.2 For Testing all consumable such as Fuel, Oil, lube oil, etc. and the load for testing shall be provided by the contactor as this cost.	Site Testing will be done on available plant load. for site testing load & fuel in client scope.	For DG set site testing Load and fuel shall be arranged by Bidder. Fuel reqd. for testing is in Agency"s scope. Bidder shall quote accordingly.
		Alarm System for Diesel Engine	Alarm System for Diesel Engine		

Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
		High Water Temp.	In Built in our Controller. Hence no separate indicator or annunciation will be provided	All the alarms shall be in built in the controller, no separate indicator or annunciation shall be provided. Bidde shall take note of it.
		Low Lube oil Pressure	In Built in our Controller. Hence no separate indicator or annunciation will be provided	All the alarms shall be in built in the controller, no separate indicator or annunciation shall be provided. Bidde shall take note of it.
		Engine Over Speed	In Built in our Controller. Hence no separate indicator or annunciation will be provided	All the alarms shall be in built in the controller, no separate indicator or annunciation shall be provided. Bidde shall take note of it.
		Engine Fail to start	In Built in our Controller. Hence no separate indicator or annunciation will be provided	All the alarms shall be in built in the controller, no separate indicator or annunciation shall be provided. Bidde shall take note of it.
		Full Load/ Maximum load warning	In Built in our Controller. Hence no separate indicator or annunciation will be provided	All the alarms shall be in built in the controller, no separate indicator or annunciation shall be provided. Bidde shall take note of it.
	Alarm System for Diesel Engine	Alarm System for Alternator		
		Over Loading	In Built in our Controller. Hence no separate indicator or annunciation will be provided	All the alarms shall be in built in the controller, no separate indicator or annunciation shall be provided. Bidde shall take note of it.

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
			Over Temperature	In Built in our Controller. Hence no separate indicator or annunciation will be provided	All the alarms shall be in built in the controller, no separate indicator or annunciation shall be provided. Bidder shall take note of it.
			AVR Failure	In Built in our Controller. Hence no separate indicator or annunciation will be provided	All the alarms shall be in built in the controller, no separate indicator or annunciation shall be provided. Bidder shall take note of it.
		Additional Specification & Condition	2.Design & Liaoning for storage HSD Yard & Fuel transfer with CCHE & other licensing authorize are in scope of contractor	As per BOQ HSD Storage not our scope of supply. We will quote as per BOQ only.	Bidder shall quote as per BOQ.
			Power & Control Wiring	Please confirm scope of cable. Please mention distance between DG Set & Sync Panel.	Nearly 30 mtr cable shall be provided between DG set and Sync panel. Bidder shall take note of it and quote accordingly.
		General Information	e)design & supply & providing aviation abstraction lights , LA & suitable earthing	We will provide Spike LA for exhaust piping structure. Please confirm	Spike LA and aviation light is existing a site. Hence stands deleted from BOQ item. Bidders shall quote accordingly.
1				Please add 2/3 local (Maharashtra) LT Panel manufacture es in make list. We are introducing 'ABAK ELECTRFAB PVT LTB 'is a ISO 9002 certified com , any (CPRI Approved).	LT panels shall be got manufacture red from any CPRI approved panel manufacturer in addition to makes given in the list of approved makes given in the tender document.

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
2				Please add 'BAJAJ in High mast & Pole make list. Bajaj L ve own manufacturing unit in Pune.	For High Mast & Poles M/s Bajaj Electricals shall be accepted.
3				Please add 'RPG REYCHEM' in transformer approved m i ke. As per our experience RPG have very good quality and having manufacturing unit in Pune.	Approved Makes for Transformer - shall stands modified to Kirloskar / Voltamp / Reychem
4				Please conform the transformer standard is 15-2006 or IF-1180. As per the circular published vide 'The Gazette of India about applicability of quality control order I.E. BIS from 01/01/2016 it is mandatory for all distribution transformers up to 2S0~ KVA, 33/0.433 KV to comply with latest standard of 15-1180 and transformer manufactures can't sell, store or produce oil filled tran,formec up to 2500 KVA, 33 KV class rating without rOmPlYing specifications as per 15.1180.	
5				BOQ of CCTV says that some are IP CCTV and some are t nalog Even the cables are used RJ 11, which is only required during analog CCTV. For IP CCTV suitable cable is CAT 6. Please clarify.	No change in BOQ items.

Sr. Io.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
6				We are requesting you to please extent the last date of I submission from 14/03/16 to 21/03/16.	
7				And requesting you to please accept EMD in full mode Bank Guarantee.	No change in tender conditions.
8				For main power control pa nels SLD & BOQ not matched e I ch other, kindly confirm which we considered for quotation.	Already replied above.
9				For 420 KVA Capacitor panel BOQ not matched as per K R, kindly confirm which we considered for quotation.	Quantity for MCCB for APFCR panel shabe read as 160 A TP MCCB- 7 nos, 63 TP MCCB 2 nos, 32 A TP MCCB 8 no Bidder shall make note of it and quote accordingly.
10				Capacitor Panel Incomer Instead of 630A MCCB But Main Power panel its not shown the outgoing.	In SLD of Main Power Panel ,outgoing for APFCR panel is shown as 800 A ACB.
11				Cable entry will be from TOP or BOTTOM only instead of both side.	Cable entry shall be from both sides.
12				Painting of panel powder coat or Enamel paint	Panel shall be Powder Coated with powered coating thickness of minimum 6 micron.
		1	Makes mentioned in BOQ & Makes mentioned in Make List in Vol II are different	Please confirm which make list have to refer	Already replied above.

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
		2	Vol II		
		5.3	Switchboard		
		5.3.1	General		
		а	The LV Switchboards shall be Totally Type Tested as per standards IEC 60439 -1	Please confirm Panels are totally Type tested or as per Approved Make List.	LT panels shall be got manufacture red from any CPRI approved panel manufacturer in addition to makes given in the list of approved makes given in the tender document.
				OVI engineers are also supplied Panels in IISER through Kalgud Constructions, so please approve make of OVI Engineers.	LT panels shall be got manufacture red from any CPRI approved panel manufacturer in addition to makes given in the list of approved makes given in the tender document.
				Short Circuit Rating of Switch Board & Switchgear is different Please confirm KA Rating of Panel	Short Circuit rating for panel & switchgear shall be 50 KA. Bidder shall take note of it quote accordingly.
		1	11KV HT Ring Main Unit (1 I/C + 2 O/G Extendible) Vacuum Circuit Breaker1no as Incomer.	As per standard practice RMU consist of SF6 Breakers with Only Short circuit & Overload protection	11 KV HT Ring Main Unit shall consist of 630 A Load Break Switch as incomer and 2 VCBs as outgoing. Bidder shall take note oit & quote accordingly.
				As per Description in BOQ Please confirm It is RMU Or HT Breaker Panel.	As per Description in BOQ it is RMU.
			Isolator should be motorized.	RMU is Motorized or Manual Operated	RMU shall be Motorised as well as Manually operated.

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
10.			1 Cable switch 22KV, 630A,20KA	Supply voltage is 11KV or 22KV	Supply voltage is 11 KV
		1.1	Design, Manufacturing, Supply, Installation, testing and commissioning on provided plinth 11 kV, 20KA, 630A extendable, Indoor type Circuit breaker consisting of 1 No. Load break switch as Incomer & 2nos of VCB with following details erected in cubical panel with short circuit, over load & earth fault protection with Aluminium busbars as directed by the engineer In charge. Schneider Electric/ABB/CG Make		11 KV HT Ring Main Unit shall consist of 630 A Load Break Switch as incomer an VCBs as outgoing.Bidder shall take note it & quote accordingly. Revised SLD is attached herewith.
		2	TRANSFORMER		

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
NO.			of outdoor type 50Hz, oil immersed , naturally cooled, Copper wound Step Down Transformer	Transformer Losses Should Be considered as per ECBC Norms or As per New IS applicable from 1 st Feb 2016 (IS 1108) (New GR is enclosed herewith for information)	Replied above. Transformer losses shall be considered as per IS 1180.
			SYNCHRONISING DG POWER CONTROL PANEL - (Location @ SERVICE BLOCK I)		
			The DG panel shall be suitable for 2 x750 KVA		
			Cubicle Details :-		
			Material of construction - CRCA - 14SWG		
			insulation level - 1100V, IP Protection - IP -		

D.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
			Indoor cubicle type free standing & floor mounting		
			Front/Rear panels - Hinged doors/ Removable type		
			Gland plates - Undrilled, dust & vermin proof		
			Cable entry details :		
			Incoming - 3200Amps common Aluminium busbar.		
			Outgoings - All outgoings by cables from top/bottom		
			INCOMER - 2 Nos. each with following sets:		
			Air Circuit Breaker :		
			Quantity: 1No.		
			Rated Voltage : 433V		
			No. of Poles : TP		
			KA rating : 65 KA		
			Current Rating : 1600 Amps		
			Releases - OC / SC / ST / EF		
			Type - Motorized - EDO		
-			Indications - OFF/ON/TRIP, RYB		

r. o.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
۰.			Sealable ER-301 - MD meter as per EB to		
			be		
			provided.		
			The ACB shall have RS 485 port with		
			gateway unit		
			for communication.		
_			Neutral Contactor of appropriate Rating		
			should		
			be provided for each DG Incomer.		
			CT SECTION:		
			CT's Measurement : 3 Sets		
			Class -0.5-15VA burden		
			Type - Cast resin		
			Ratio - 1250 / 5A		
			BUS - 3200A,		
			Aluminium bus bar for phase.		
			Bus bar supports - Epoxy insulators		
			Bus bar sleeves - Nylon		
			Internal & Control wiring - To be with ferrules		
			halogen free wiring make only		
			Heat Resistant type, 1100V grade single		
			core copper flexible.		
+			BUS COUPLER - 1 Nos. Each with following	IN SLD Buscoupler is not shown	In SLD Bus Coupler is shown as 3000
			:	222 2333345101 101 01101111	ACB
		1	Air Circuit Breaker :		
			Quantity: 1No.		

Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
		No. of Poles : 4P		+
		KA rating : 65 KA		
		Current Rating : 3000 Amps		
		Type - Motorized - EDO		
		Indications - OFF/ON/TRIP		
		The ACB shall have RS 485 port with gateway unit		
		for communication.		
		OUTGOINGS - 3 Nos. Each with following :		
		Air Circuit Breaker :		
		Quantity: 1No.		
		No. of Poles : TPN		
		KA Rating: 65 KA		
		Current Rating :1600 Amps		
		Type - Motorized - EDO		
		Releases - OC / SC / ST / EF		
		Indications - OFF/ON/TRIP		
		MFM digital meter for KW meter, KVA meter, KWH meter, Ammeter,		
		Voltmeter, HZ meter, PF meter sealable type digital display		
		Make : Electrex, Socomec		
		The ACB shall have RS 485 port with gateway unit for communication.		
		CONTROL & RELAY SECTION		
		INCOMER SIDE : 02 Sets of		
		Synchronising Relay(
		01 for each DG set)		

Sr.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Fulle
		25.1.1	RELAYS:		
			Synchronising Relay DIEFF/COMAP make along with differential protection, AUTO/MANUAL synchronising operation of DG sets with all the protections as follows.		
			Synchronising relay should have following protections		
			Voltage operated single phasing and unbalance preventer - VAG-11		
			Static earth leakage, Reverse Power, Under Voltage, Over Voltage, Circulating Current,Over Current,Trip Circuit supervision,Field Failure, Master Trip, Temperature Scanner etc complete.		
			Internal & control wiring - To be with ferrules & FRLS wires only, heat resistant type, 1100V grade single core copper flexible. METERS - 2 Sets:		
			3 Phase 4 wire 440volts, Voltmeter digital type		
			Digital Ammeter with CTs		
			Range - 1250 Amps		

ir. lo.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
0.			Sealable MD meter ER - 301 as per EB.		
			RYB indicating lamps		
			MFM digital meter for KW meter, KVA meter, KWH meter, Ammeter, Voltmeter, HZ meter, PF meter sealable type digital display		
			Make: Conzerveo/Socomec.		
			The Panels shall meet the following functions:		
			ANNUNCIATION:		
			a. Engine over & slow crank.		
			b. Oil press not built high temperature shut.		
			c. Battery charger failure.		
			d. External over load trip.		
			e. All facilities.		
			f. Lube oil pressure.		
			g. Lube oil temperature		
			h. Water temperature.		
			Hooter and Push Button to accept and reset. The unit shall be provided in generator control panel.		
			Panel should be fully functional with		
			1. Auto mains failure.		
			2. Auto synchronization.		
			3. Auto load sharing.		
			4. Load dependent operation.		

	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
			AUTOMATION:		
			Control circuit should be designed for fully AUTO/MANUAL operation of all the DG sets connected to the Synchronising panel with proper protection, load sharing, Auto ON & Off of DG sets.		
			LOGIC/FUNCTION:		
			1. On Normal Condition :		
			Transformer to feed independently through ACB		
			2. If EB Fails (Abnormal condition)		
			All the DG starts Automatically, feeds the load directly.		
			3. As per the load condition shut down the DG sets. And If the load goes more than 80% of one DG it starts the other DG Automatically & shares the load.		
			Stopping of DGs on EB restoration with provision for idle running.		
			5. DG supervision for equal running time sharing.		
			6. Auto Load sharing.		
			7. Load management.		
			8. Auto synchronizing.		

).	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
-			SMPS Based Battery charger for each DG Set 24V 30A2 No.		
			Selector Switches		
			Control Relays		
			Regulated Power Supply		
			Main Power Panel -1 - (Location: SERVICE	Pnel is not given in SLD	As per revised SLD.
			BLOCK)		
			Main Power Panel -2 - (Location: SERVICE BLOCK)	Panel is not given in SLD	As per revised SLD.
			Main Power Panel -3 -	Only given in SLD & not mentioned in BOQ	As per revised SLD.
			Main Power Panel -4 -	Only given in SLD & not mentioned in BOQ	As per revised SLD.

Sr. Io.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
3.		35	Supplying, installation, testing and commissioning of MAIN LT POWER PANEL, fully compartmentalized cubical type sheet clad Outdoor type, totally enclosed with IP55 degree of protection suitable for use on 415 Volts 3-phase, 4 wire, 50 Hz system having required fault capacity, housed with incoming and outgoing, Aluminium bus bars interconnection etc. with indication lamps, accessories etc.The panel shall have provision for taking the power load of additional floodlights in future to increase the lux levels from present value of 1200 lux to 1500 lux to main camera for clour TV transmission with complete accessories.	or Microprocessor Based .(As per Technical Specification Above 250 A MCCBs are of Microprocessor)	A) BOQ item no 35 is a panel for High Masts. Location of this panel is different, hence not shown on SLD. B) All the MCCBs above 250 A shall be microprocessor based. Bidder shall take note of it & quote accordingly.
		25.1.4	AUTO CAPACITOR CONTROL PANEL (420KVAR) - 1 & 2 - (FOR SERVICE BLOCK)		
			discharge resistors etc.,		
			The capacitors shall be gas filled with detuned filters.	A)Please specify Percentage of Detuned Reactor 7% or 14% B) Voltage of Capacitor 415 V or 440 V	Percentage of Detuned Reactor shall be 7% & Voltage of capacitor shall be 440 V

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
NO.		26	EPOXY Cast Current Transformer (C.T.) Make:- Huphen . This job should be carried out by the authorized person of Huphen. Scope includes shut down permission from MSEDCL, arrangement of liasoning with MSEDCL testing division for removing seal, replacement of CTs testing of CTs, approval etc. complete for resumption of supply with new CTs. The rate for this Item includes:- 1)	Please specify job of lisioning a) Lisioning scope includes of Additional Load Section or Maximum Demand Load sanction. B)Load sanction letter available with IISER and only coordination with MSEDCL for changing the Ct's in Contractor Scope. c) Statutory Charges are in Scope of IISER or in scope of Contractor.	Load sanction letter is available with IISER and coordination with MSEDCL for charging the CT's shall be in Bidder's scope. Statutory charges if any shall be paid by IISER.
				A) The second of	
				A) Transformer: 1.As per suggested by Manufacturer, Tapping ranege is +5% to -15% @ steps of 2.5 % and not 1.5% as per Tender.	For On load tap changer, tapping range of +5% to -15%@ 1.25% shall be accepted.
				2. As per specification temperature rise is 40/45 C, as per BOQ IT IS 50/55.	Temperature rise shall be 50/55 i.e. as per BOQ

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
				3. Impedance as per Specification is 6.25% and as per BOQ it is 5%.	Impedence shall be 5% as per BOQ.
				4. As per Suggested by Manufacturer, Highest system voltage will be 12 KV for 11 KV Transformer, in specification it is mention 24 KV.	Highest system voltage shall be 12 KV.
				5.As per Suggested by Manufacturer, They will Provide Dial type Oil temperature Indicator and Winding temperature Indicator as Marshaling Box is there. Stem Type is NOT APPLICABLE.	Oil temperature indicator and Winding temperature indicator shall be Dial type
				6. In Specification termination mention as Cable Box / Bus Duct and in BOQ it is Cable box/ Cable box.	Termination shall be for HV-Cable box, fo LV Cable box
+				B) HT Panel :	
				1. L&T make VCB not in approved make list.	As per tender documents.
				2. Please Mention Incoming and Outgoing points for Feeder Pillar.	Shall be revised SLD.
				3. Feeder Pillar approved makes i.e. MSEDCL or any Other?	Replied above.
				Please accept full EMD in form of Bank Guarantee	Not accepted. No change in tender conditions.
				Please accept 80% payment against material on site	Not acceptable. Payment shall be as per terms and condition of the tender document.
				Specification of remote tap changer cubical (RTCC) not mention in BOQ.	As per BOQ item
				Specification of Battery & battery charger not mentioned in BOQ.	As per OEM standards.

	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
		A	PART A: TECHNICAL SPECIFICA	TIONS
			HT cables	
			As per this clause, the cable trench required for cable laying shall be provided by client to contractor, please confirm.	Excavation of cable trench shall be payable under item No 52.1.
			LT cables	
			The cable shall be wire armoured or tape armoured, please confirm	Lt cables shall be tape armoured .
			DG set	
			The VAT on whole work@ 2% shall be deducted from each bill, please clarify the clause.	VAT on whole work @ 2% shall be deducted from each bill.
			Stadium mast	
			As per this clause contractor is need to design the stadium mast and associated system Please provide the details of soil bearing capacity	Soil bearing capacity ie. 15T/sqm is already mentioned in BOQ item no 28.1
			STADIUM MAST	
			Please provide the details of soil bearing capacity to enable us to design the foundation.	Soil bearing capacity ie. 15T/sqm is already mentioned in BOQ item no 28.1
			CABLES FOR HIGH MAST	
			The LT Cables shall be strip armoured or round wire armoured.	LT cables shall be strip armoured.
			APPROVED MAKES	
			Please include the following vendors in approved makes	As per tender documents.
			Lighting control unit - Schneider/Siemens	

r. o.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
				LT Panels Ovi Electricals/Pyrotech/Square automation/Prathoma/Indochem/ Any well known CPRI approved vendors Maharashtra. LuminairesBajaj (Disano) Stadium Mast - Bajaj Lamps - Bajaj	1) LT panels shall be got manufacture of from any CPRI approved panel manufacturer in addition to makes given the list of approved makes given in the tender document. (2) For High Mast & Poles M/s Bajaj Electricals Ltd. shall be accepted. (3)Additional Approved Make flood light fixture - Disano - Forum. (4) E (Abacus) stands deleted from the approved makes list.
			В	PART B: BOQ	
			BOQ - Item No.1 - RMU	We request you to kindly approve system house of ABB/Schneider etc. for RMU.	No change in approved makes.
			BOQ - Item No.4.1 - 8 - Cables	As per this clause ready trenches shall be provided by client, please confirm.	Replied above
			CCTV	The makes for CCTV is not given, please furnish.	Makes for CCTV is given in the BOQ & of approved make of materials.
			DATA SYSTEM	Only one make has been given for data cabling, please furnish other makes also.	Ofc shall be Dlink or equivalent makes.
			TRANSFORMER		
		12	As per spec, temp rise is 40/50'c but as per BOQ it is 50/55'c	Please clarify	Replied above
		13	Impedence as per spec is b.25% (15 tdreance) & as per BOQ it is 5%	Please clarify	Replied above
		14 a	Transformers offered will be with convectional tank with detectable conservator and radiator	Please clarify	Transformer shall be supplied with fixed conservator. Detached radiator shall be accepted.

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
110.		14 b	As per spec, mentioned as explosion vent/PRV, whereas as per BOQ, mentioned as explosion vent		Replied above
		14 c	OLTC mentioned in the spec & BOQ are with +5% to -15% @ 1.5%. However approved vendor offering OLTC with +5 to -15% @ 1.25% (16 steps OLTC)		Replied above
		14 d	Highest system voltage will be 12V as this 11 KV transformer in Specification it is mentioned as 24 KV		Replied above
		14 e	Approved vendor are offering Dial type oil temperature indicator and dial type winding temperature. As marshalling box is there stem type not applicable		Replied above
		14 f	In specification termination mentioned as cable box/busduct as in BOQ it is mentioned as cable box kindly clarify.		Replied above
		1		As per the Government of I India Notification from ministry of Small Micro and Medium Enterprise it is mandatory for all Central Ministry/DepartmentIPSLJ to give exemption for payment of EMD and tender fees to all NSIC registered vendors as per notification. We are enclosing herewith the copy of Government of India notification. So it is requested you to please consider this waived us from submitting EMD.	This tender is works tender and EMD is required to be deposited as per terms and condition of the tender.
		2		We request you to please accept the make of the system house for the 11 KV HT VCB Panel using the specified make of HT Breaker as per the list of approved makes.	No change in approved makes given in the tender documents.

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
140.		3		It is requested to please accept the VCB, CT's, PT's, Indication Lamps, Push buttons, selector switches and relays of the makes suggested by the OEM of the Product like HT Panel, Transformer and L T Panels as they do not provide the makes as suggested in the list of approved make & in case the same is asked for the delivery schedule becomes very long.	No change in approved makes given in the tender documents.
		4		In the BOQ item No.1. In the specification of the HT Panel there is specification of the battery charger mention with al I the interconnections. But in the BOQ there is no description about tRe. battery charger and its accessories. Kindly 'clarify if we have to consider the same while quqting the price of the HT panel.	Battery Charger as per OEM recommendation shall be provided. Bidder shall quote accordingly.
		5			Aluminium busbar shall be considered. Bidder shall quote accordingly.
		6		In the SOQ Item No. 2.it is mention in the BOQ and technical specification that the transformers shall confirm to IS 2026 & 11171 with latest amendments and BOO specifies confirming with the losses as per ECBC, We wish to inform you that the after January 2016 as per government of India notification all the oil cooled transformer up to 33KV rating 2500KVA has to be manufactured considering the losses as per IS1180. The transformer manufacturer cannot manufacture the transformer as per old IS. So we request you to please make necessary amendment and issue the same.	Transformer shall be supplied as per IS 1180.
		7			Civil work is included in BOQ and shall be paid accordingly.

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
110.		8		Please confirm if the DG set foundation will be constructed by us and the price will be included in the SITC of the DG Set.	Civil work is included in BOQ and shall be paid accordingly.
		9		In the BOQ item no.25.1. It is mention in the panel fabrication details that the any panel more than 1.5 meters width will be made in each parts not exceeding 1.5m. We wish to inform you that the panel length as per the BOQ description can increase more than 1.5.mtrs.Kindly clarify what this point means.	Panel shall be manufactured in parts of 1.5 mtr length as per tender documents.
		10		In the specification of the MCCB it is mention that the breaking capacity of the MCCB as per following:-	
			a	Upt0100Amps-15kA	For MCCB above 250A to 1000 A breaking
			b	Above 100Amps upto 250Amps-36kA	capacity shall be 50 KA
			С	Above 250Amps to 1000Amps-50kA	
				But in the SOQ some of the MCCB above 250Amps are mentioned with 36KA. Kindly confirm which breaking capacity has to be considered while quoting.	
		11		We request you to please provide us the model no. of external man rider.	Design as per Pole manufacturer and details given in the BOQ item.
		12		Inlhe SOO Item No.45. It Is me[1tion to supply and laid the RJ-11 Coaxial cable . Kindly confirm If it is to lay open or in conduit	Cable shall be laid in conduit.
		13		We also requested you to please add the other panel manufacturer make like "Peaton Electrical Company Limited, -Power & Instrumentation (Guj).Ud., &. Rittal" in the approved make of MV Switchboards(L T Panel) as we are CPWD approved panel builders and have valid CPRI Type Test Certificates and also we have supplied and installed the above manufacture panel at various government projects.	LT panels shall be got manufacture red from any CPRI approved panel manufacturer in addition to makes given in the list of approved makes given in the tender document . For High Mast & Poles M/s Bajaj Electricals shall be accepted.

Sr. No.	Description	Reference	As per tender document	Queries from bidders	Reply from IISER Pune
		14		It is requested to kindly add these more makes In thJ list of approved makes of the tender and contract document in addition of other approved make of below items:	
		Sr No	EQUIPMENT	MAKES	
		1	MV Switchboards(LT Panels)	Peaton Electrical Company Limited, Power & Instrumentation (Guj).Ud., Rittal	No change in approved makes given in the tender documents modified to the extent by issue of this MOM.
		2	LT Cables	RAVIN, RPG,HAVELLS	
		3	Cable Trays	Ricco, Slotco, Indiana, MEM	
		4	HT Panel and Breaker	Kirloskar, Crompton, Jyothi.	
			IISER Pune bank Account Details for preparation of BG	Account holder name:	Director IISER Pune
				Account Number:	30042605732
				Bank name:	State Bank of India
				Branch name:	NCL Campus Branch
				Telephone No.:	020-25898485
	·			IFCS code:	SBIN0003552
				MICR code:	
				IISER Pune PAN No	AAAAI1546E

Superintending Engineer , IISER PUNE

