PROJECT	Survey, Design,Engg, Supply, Erection, Testing and Commissioning of New 33 kV Switchgear panels including Minor Civil Works and Dismantling of Exisiting Equipments on Turnkey Basis at GB Pant Grid, Delhi				
NIT Ref	CMC/BY/22-23/RS/MD/33				
Doc. Title	Pre Bid Queries_Techical				
Sl. No.	**Section No.**	**clause no.**	**Clause description**	**Comment**	**BYPL Reply**
1	**SECTION-II INSTRUCTIONS TO BIDDER**	2.0 (page 11 of 259) 3.a (page 75 of 259)	The scope of work under this contract shall include the turnkey execution on End to End Basis ,including Survey, Designing, manufacturing, inspection & testing, dispatches, loading ,unloading ,storage at site, dismantling of existing equipment, installation, testing of the installation, commissioning ,handing over to the purchaser.	Noted. However storage at site not included in scope. -Structural and Civil work is not included in scope. -Obtaining statutory clearance & certification from Electrical Inspector and any other statutory authority is not included in scope.	Kindly adhere to tender document
		3.b (page 75 of 259)	Any supply/work details not explicitly mentioned in this scope but mandatory for successful commercial operation of the substation shall be deemed to be included in bidder's scope.	Offered Scope of supply and work shall be as per BOM and clarifications/deviations submitted along with bid.Any additional equipements required at later stage shall have price and time implications	BYPL shall not go through any submitted BOM by bidder. Scope of supply & work shall be governed by Tender document and clarification/deviation submitted by bidder.
		3.2.2 (page 76 of 259)	Control And Auxiliary power Cables with proper ferruling and tagging along with glands and lugs	1.Battery limit of control cables to be clarified. Whether cables between 33kV and 11 kV are for interlock and inter trip? Please clarify. 2.SS and transformer yard layout indicating with transformer yard panel and marshalling box etc. shall be furnished.	1. Point not clear "Battery limit of control cables to be clarified. " 2. Transformer LV REF scheme is common for 33 KV AND 11 KV Switchgear. 3. Kindly fetch all details from site itself.
		3.2.3 (page 76 of 259)	Cable Tray including bends etc with 50% spare capacity in each	It is difficult to maintain 50% spare capacity in trays due to space constraint, we propose 20% spare capacity.	Every effort shall be made to provide 50% spare capacity in cable trays. If not possible, deviation shall be provided at the time of detailed engineering
		3.2.7 (page 77 of 259)	Earthing_a) For Complete Grid S/S b) It also includes earth mesh design c) Designing of Earth mesh shall be such that Mesh to Earth resistance shall be 0.5 ohm	For earthing design during tender stage, soil resistivity report shall be shared, we have not included soil resistivity in our scope.	Earth resistivity test shall be in bidder's scope.
		3.2.23 (page 77 of 259)	Civil work	Soil bearing capacity and spec for civil design to be furnished	As there is no building foundation works at GB Pant Grid SS hence soil bearing capacity is not envisaged.
		3.3.7.2 (page 78 of 259)	Modification in Existing 33 kV Switchgear Room	Major civil work like extension of SS etc. shall be excluded from scope	Kindly adhere to tender document
		3.3.7.2 (page 78 of 259)	New trench/repairing of cable trench within 33 kV Switchgear Room for power and control cables	Please clarify -Existing Trench to be modified or a complete new Trench to be made ?	Within 33 KV Switchgear room, New trench shall be provided.
		3.3.7.3 (page 79 of 259)	Gate at Existing 33 KV Switchgear Room	Same is excluded from scope.	No deviation in this regard. Kindly ahdere to specification.
		3.3.7.4 (page 79 of 259)	Road	Same is excluded from scope.	No deviation in this regard. Kindly ahdere to specification.
		3.3.7.7 (page 79 of 259)	Yard Development	What is scope, please elaborate?	Gravelling of Outdoor yard area shall be in Bidder's scope.
	SCOPE OF TURNKEY EXECUTION FOR REPLACEMENT OF 33 kV AIS AT GB PANT GRID S/S	3.6.6 (page 81 of 259)	Construction Water and power shall be arranged by Contractor at his own cost.	same is not included in SEIL 's scope.	Construction power shall be provided on chargeable basis by BYPL. Although construction water shall be in bidder's scope.
		3.6.16 (page 82 of 259)	Electrical Inspector Clearance	Not in scope.	For 33 KV Switchgears, Electrical Inspector shall be from BYPL (Inhouse). Clearance from that inspector shall be in bidder's scope.
		3.6.22 (page 82 of 259)	Any damages done to the existing system, shall be repaired/ rectified/ replaced	SEIL shall not be liable for any repair /rectify and replacement occurred due to damage to existing system.	No deviation in this regard. Kindly ahdere to tender document.
		3.6.24 (page 82 of 259)	External Agency Clearance	Not included in scope	Noted
		4.1.6 (page 84 of 259)	Fire retardant coating on cables	Same is not mentioned in Price schedule and hence not complied and not included in scope.Please confirm if same is required.	Full length cable within substation shall be considered for fire retardant coating on the cables.
		4.2 (page 88 of 259)	Enclosure degree of protection: IP 4X for high voltage compartment IP 5X for low voltage compartment	Overall degree of protection shall be IP 4X.	Noted
		4.3 (page 88 of 259)	Enclosure Material pf pre-galvanised CRCA	The panel enclosures are fabricated from AluZinc sheets. The doors and covers are fabricated from CRCA sheets	Noted
		4.6 (page 88 of 259)	Separate Compartments for-Bus bar, Circuit Breaker, HV incoming cable, HV outgoing cable, PT, LV instruments & relays	Current transformers are located in the cable compartment. The Line VT is mounted on the breaker trolley of the associated feeder panel.	Noted
		4.16 (page 89 of 259)	Required HV cable termination height in the cable compartment -650 mm for 11 KV.	The height of cable termination shall be 550mm.	Noted
		4.19 (page 90 of 259)	APFC	Capacitor banks panel,APFC unit ,Wiring of Bus PT , Incomer CT and Capacitor CT upto spare terminal for APFC are not included in scope.	As 33 KV Switchgear does not contain any APFC relay. Hence this point is not valid.
		5.5 (page 90 of 259)	Tulip contact shall be provided without any gap between contacts	Breakers shall have finger contacts in line with our type tested design.	Noted. Although there shall be no gap between any finger.
		8 (page 94 of 259)	Current transformers	CTs shall be epoxy cast wound / ring type. The same shall be suitable for withstanding the fault STC for 1sec. The VA burden for CTs shall be as per our offer BOM. Detailed calculation in support of the same shall be furnished during detail engineering in the event of an order. The CTs are designed and tested in line with IEC 61869-2. Minimum CT primary current shall be 50A.	1. Noted for CT Type. BSES shall not go through any BOM . 2. Although burden shall be finalized during detailed engineering subject to submission of calculations for connected burden with 50% margin. 3. Rest all parameters of CT shall be as per specification

		9 (page 94 of 259)	Voltage Transformer	VTs shall be epoxy cast dry type. The VA burden for VTs shall be as per our offer BOM. Detailed calculation in support of the same shall be furnished during detail engineering in the event of an order. The VTs are designed and tested in line with IEC 61869-3. The Line VT is mounted on the breaker trolley of the associated feeder panel. Bus VT has not been considered.	1. Noted forVT Type. BSES shall not go through any BOM . 2. Although burden shall be finalized during detailed engineering subject to submission of calculations for connected burden with 50% margin. 3. Rest all parameters of PT shall be as per specification 4. Noted for Line VT mounting.
		22 (page 115 of 259)	Nameplates	- Switchgear rating plates are performed as adhesive plastic foil - Labels for internal devices are performed as plastic stickers - Panel name plates are performed as adhesive plastic foil	All labels/rating plates/Name Plates shall be as per technical specification. Although Internal labels can of adhesive type.
		25.1.1 (page 117 of 259)	Last five years from date of bid submission. Bidder with type test report more than 5 years old needs to re-conduct the tests without any commercial implication to BSES Type Tests-.	Type test reports are submitted,No fresh type test charges included in scope.	Noted
		1.15.1(page 127 of 259)	Material-Tinned Electrolytic copper	Main bus plating shall be as per our type tested design	No deviation in this regard. Kindly adhere to specification.
		1.16(page 127 of 259)	Auxiliary bus bar - Electrolytic grade tinned copper	Aux. bus is not applicable. Control supply shall be distributed over wire bus.	Noted
		6.4 (page 130 of 259)	Discharge class -3	Surge arrestors shall be Class I considering distribution application.	Noted
	Annexure-4 SCADA Network Architecture	2.1 (page 258 of 259)	SCADA	SCADA-Hardware, software, networking switches and cables required for interfacing S/S- SCADA to central SCADA system is excluded from scope. Our scope is limited to supply and integration of Ethernet switch with Numerical relays along with OFC cable inside S/S. Please provide details of distance from 11 kV SWGR panels to RTU/ central SCADA, also confirm hardware/ software required for hooking up meters to RTU.Currnetly we have not included in scope. Supply of hardware and integration of Ethernet Switches from S/S to RTU of S/S is not in our scope. We do not envisage any other work for SCADA.	RTU hardware and software part is in BYPL scope, rest all hardware and software is in vendor scope including network switches,Optical cables,CAT 6 cable upto RTU, etc RTU to central scada(MCC) is not in vendor scope. Noted,All numerical relays shall be connected to Ethernet switch with Optical patch cord in PRP network. MFM is looped in daizy chain and RS485 serial cable shall be laid upto RTU in 2 Inch PVC pipe along with wall. Ethernet switches of CRP/swicthgear panels is in vendor scope with their integration and configuration.CAT 6 cable shall be laid upto RTU switch in 2 inch PVC pipe along with wall.please refer tender document for SCADA work
			Cables	We understand that 11 kV OG feeder cables and any cables which is going out side of SS are not included in our scope. Please provide battery limit for cables scope.	This point is invalid in nature as this tender pertains to 33 KV Swicthgear.
			Cabel trays	Cable tray estimation for our scope of supply cables only. Please confirm. There is no spec of cable trays, will consider GI/Ladder type. Please confrm.	Noted.
			Any supply/work details not explicitly mentioned in this scope but mandatory for successful commercial operation of the substation shall be deemed to be included in bidder's scope	SEIL 's scope shall be limited to BOQ and technical deviations/clarificaitons which would be submitted as offer documents. Any additional equipments/services required in future shall be offered on chargeable basis.	BYPL shall not go through any submitted BOM by bidder. Scope of supply & work shall be governed by Tender document and clarification/deviation submitted by bidder.
			Surge arrestor	Gapless metal oxide type surge arrestors shall be provided for motor / capacitor and dry type transformer feeders only. The same shall be suitable for 2.5pu. Additional RC circuitry for the same is not envisaged.	Noted
			Lighting and Lightning work	Any kind of lighting OR lightning work is excluded from scope.	Kindly go through the tender document for scope clarity.
			Civil works	Any kind of civil work shall be in scope of BYPL. Please confirm.	Kindly go through the tender document for scope clarity.
			Turn Key Estimation	We understand 11 kV etc. ratings given in spec are firm and we require to estimate only for cables, tray, steel, earthing and lightning etc. for battery limit with in SS only. Please confirm.	This point is invalid in nature as this tender pertains to 33 KV Swicthgear.