

POWER GRID COMPANY OF BANGLADESH LIMITED

Design, Supply, Installation, Testing and Commissioning of 230/33kV GIS Substation at Char Fasson & 230kV GIS Bay Extension at Nutan Bidyut Power Plant on turnkey basis.
Under

Southwest Transmission Grid Expansion Project.

[Bid Identification No.: PGCBA/ADB/3683/STGEP/CHARFASSON/SS]

CLARIFICATION NO.1

A pre-bid meeting was held on June 29, 2022 as per provision of ITB 7.4, Volume 1 of 3 of the Bidding Document. Clarifications to the queries received from the prospective Bidders regarding the Bidding Documents prior to and during the Pre-bid meeting are given below which will form part of the bidding document.

No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
1.	Volume: 2 Clause No: 10A.3.7	Bidder's Queries: There is no clear area for landscaping and greening in the drawing	The bidders are requested to read carefully Clause No: 3.4 of section 10A & 10B of volume 2 of 3 of the bidding document.
2.	Volume: -3/2M	Description: Civil Works, Building and Foundation Bidder's Queries: Whether the project needs to set up an independent fire pool and fire pump room It's not shown in the drawings.	It is the responsibility of Contractor to prepare drawing/design for such facilities to comply the employer's requirement. Drawing of pump room / water reservoir shall be submitted by contractor & finalized during contract execution stage. Please refer to 2M5 of Schedule A & B of Volume 3.
3.	Volume: -3	Description: Schedules of Rates and Prices Bidder's Queries: The document describes the transformer setting water spray protection system, why the Qty is "0"?	Your question is not clear.

Clarification-1_Charfasson SS_Package-6_STGEP

No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
4.	Volume-III- SCHEDULE-1, Clause no. 2M4.1.4	Description: Bidder's Queries: EOT crane for 230KV GIS Hall shall be consider Single Girder type. Please confirm Description: Section 6: Employers Requirements 1.3 Type Test Requirements Test carried out at manufacturer's own testing laboratory must have been witnessed and certified by a representative from STL member testing laboratories. Bidder's Queries: Please clarify whether it is acceptable that the Type Test carried out at a third-party independent laboratory (not the manufacturer's own testing laboratory) witnessed and certified by a representative from STL member testing laboratories?	Detail design shall be submitted & finalized during execution stage.
5.	Volume: 1 of 3		Acceptable.
6.	Volume: 3 of 3	Description: SCHEDULE A 1B 245KV GIS Switchyard, structures & connections Note: The make of existing GIS at Nutan Bidyut Power Plant is Siemens, India. So, the extension of GIS bay shall also be of the same make & model. Bidder's Queries: Please clarify whether or not "same make" refers to Siemens of any country of origin?	Yes. "Same make" refers to Siemens of any country of origin But model has to be identical.
7.	Volume:2 Clause No:	Bidder's Queries: According to the description in the technical requirements Volume 2 , online monitoring devices need to be set up in this project. But it is not listed in the BOQ table; please clarify whether it needs to be set in the project.	Your question is not specific. Please follow the bidding document.

No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
8.	GCC-Page 7/31-Subclause 23.2 of main clause 23: Test and Inspection:	Description: The Employer and the Project Manager or their designated representatives shall be entitled to attend the aforesaid test and/or inspection, provided that the Employer shall bear all costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses. Bidder's Queries: In many specifications such costs including visa fee, health insurance, transport, accommodation, food, daily allowance is part of inspection which need to be considered in the price bid (refer- GIS TS clause- 3.4.6.23.4, page 50 of 78 and " INTRODUCTION & PREAMBLE TO THE PRICE & TECHNICAL SCHEDULES" of V3, Section-III: Training and Inspection, sub clause-C, page 29 of 29) We request to clarify regarding the same, whether such cost need to consider in price bid or not?	All kinds of FAT/Training mentioned in the Section-III of Schedule-A (Schedule of requirements) of volume 3 of 3 of the bidding document shall be included in the scope of works under this Contract. Please follow the terms and conditions of the bidding document.
9.	Section 3: Evaluation and Qualification Criteria, page 3 -11	Description: Form EXP-4 need to submit along with the qualifying documents for many manufacturers Bidder's Queries: We request to provide the format for FORM EXP.4	EXP-4 is a typo error. It shall be EXP-3. Please follow the format EXP-3 only.
10.	General	Description: Technical Specification & Qualification requirement of 300kVA Station Transformer Bidder's Queries: We request to share the same.	Minimum technical requirement /specification has already mentioned in the bidding document. The bidders are requested to read carefully the bid document.
11.	ITB Clause 21: Bid security	Description: an unconditional bank guarantee (hard copy of the bank guarantee or in the form of SWIFT message MT760), all from a reputable source from an eligible country as described in Section 5 (Eligible Countries). Bidder's Queries:	Confirmed

No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
		We understand that we can submit the bank Guarantee as Bid security of any scheduled bank from India, please confirm?	
12.	ITB Clause 21: Bid security	Description: an unconditional bank guarantee (hard copy of the bank guarantee or in the form of SWIFT message MT760), all from a reputable source from an eligible country as described in Section 5 (Eligible Countries). Bidder's Queries: We understand that we can submit the bank Guarantee in INR, please confirm?	Currency of Bank guaranty shall be as per ITB 21.1.
13.	General	Description: Power & Water for Construction Work Bidder's Queries: We understand that Power and water to a single point for construction work will be provided free of cost to successful Bidder by M/S. PGCB, Please confirm our understanding.	It is the contractor's responsibility to arrange Power & water for construction purpose. Employer may give administrative support (if required).
14.	General	Description: Coordinates of Char Fasson Bidder's Queries: Please provide the coordinates marking property line for proposed site of Char Fasson.	Please find the Co-ordinate mentioned below: 22.141643 N & 90.735342 E, 22.142538 N & 90.736181 E, 22.141646 N & 90.7373 E, 22.140764 N & 90.736517 E However, the bidders are requested to visit the site for exact location.
15.	General	Description: Land Acquisition Bidder's Queries: We understand that M/S.PGCB has already acquired land for proposed	Confirmed.

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No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
		site and encumbrance free land will be provided to successful Bidder, Please confirm.	
16.	Volume-2	Description: Clause 10-A.1.1_Scope of Work Bidder's Queries: Scope of work in this clause explain about construction of Underground and Overhead Water Storage Tank, But Price Schedule of Civil works does not include any line item for construction of Underground and overhead water storage tank and same is not marked in tender layout of Char Fasson site, We understand that the construction of same is not in Bidder's scope, Please confirm.	This is a turnkey contract. Each and every item required for successful commissioning of the substation may not mention in the Price schedule. The contractor is responsible for ensuring that all and/or any item(s) of work required for the safe, efficient and satisfactory completion and functioning of the works, are included in the Bid Price whether they be described in the specification/price schedule or not.
17.	Volume-2	Description: Price Schedule No-1_Civil Works, Building and Foundation Bidder's Queries: Layout of 230/33 kV GIS_CHAR FASSON SS provided with tender document shown Space for Gardening & Decoration, However the line item for same work is not included in Price schedule of Civil works, We understand that the Gardening and decoration scope of work is not included in Bidder's scope, Please confirm.	Space provision shall be kept for gardening. However, the bidders are requested to read carefully and follow Clause No: 3.4 of section 10A & 10B of volume 2 of 3 of the bidding document.
18.	Price Schedule_Civil Works	Description: Dismantling/Shifting Work Bidder's Queries: We understand that Dismantling/shifting works, Trees and bushes cutting is not in Bidder's scope and successful bidder will get encumbrance free land, Please confirm.	Your understanding is not correct. Please follow the bidding document.

No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
19.	General	Description: RMC for concreting works Bidder's Queries: We understand that approved ready mix concrete (RMC) is allowable for concreting works, we request to please provide approved RMC vendors list.	RMC is not allowed under this contract.
20.	Price Schedule Civil Works	Description: Quantity Variation Bidder's Queries: We request to please provide us the details on maximum allowable quantity variation in percentage.	Please follow the GCC clause 39.
21.	Volume-III- SCHEDULE-1, Clause no. 2M4.1.4	Description: Bidder's Queries: As per Referred clause, EOT Crane shall be 7 Ton Capacity, However as per Section Drawing of GIS Hall, same shall be 5T. We understand that we need to follow Price schedule. Please Confirm.	EOT Crane shall be 7 Ton Capacity.
22.	General	Description: Disposal of excess Soil and Concrete Bidder's Queries: We request to please provide us the location for disposal of excess soil and concrete waste. Kindly mention the distance from proposed site to disposal yard.	It is the responsibility of Contractor to dispose of excess soil, mud, concrete waste and any other waste to safe distance. The bidders are requested to visit the site for assessing the safe distance for disposal.
23.	General	Description: Approved make of Construction materials Bidder's Queries: We request to please provide the list of approved make of construction materials like Cement, Reinforcement Steel, Structural Steel and paints etc.	Please refer to section 10A & 10B of volume 2 of 3 of the bidding document. Approval of construction material shall be finalized during contract execution stage.

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No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
24.	Volume 2 & 3, GIS Extension - Nutan Bidyut & GIS S/s-Char Fasson	Description: Order of precedence Bidder's Queries: We understand in case on ambiguity in supply based on Bill of Quantity, schedule of requirements (schedule-A) and technical specification, BOQ shall prevail. Please confirm	The contractor is responsible for ensuring that all and/or any item(s) of work required for the safe, efficient and satisfactory completion and functioning of the works, are included in the Bid Price whether they be described in the specification/price schedule or not. If any ambiguity arises regarding any supply item which is not necessary for the safe, efficient and satisfactory completion and functioning of the works/facilities, than order of precedence mentioned in the Contract form "Contract Agreement" under section-9 of volume 1 of 3 of the bidding document shall be followed.
25.	Volume 2 & 3, GIS Extension - Nutan Bidyut & GIS S/s-Char Fasson	Description: Bill of Quantity Bidder's Queries: We understand that addition or deletion as per price schedule is applicable subject to actual requirement during detailed engineering, else quantity as indicated in price schedule shall be considered as minimum requirement. Please confirm the contractual requirement	Your understanding is correct.
26.	Volume 3, GIS Extension - Nutan Bidyut 1K Batteries, Chargers and DC Distribution	Description: Upgradation/extension of existing 220V DC System Bidder's Queries: We understand existing 220V Battery & Charger is adequate to accommodate the load requirement for extension bays, EPC scope is limited to necessary addition of DC feeders in existing panels. Please confirm	Existing 220V Battery & Charger is adequate to accommodate the load requirement for extension bays but all other necessary equipment for extension of existing 220V DC distribution system including cables, DC distribution panels (if necessary), MCCBs (with spares) and any other equipment necessary to provide DC supplies to all DC loads in the new diameter & SAS connection shall be provided.

No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
27.	Volume 3, GIS Extension - Nutan Bidyut 1L LVAC Distribution	Description: Upgradation/extension of existing 415V AC Dist. System Bidder's Queries: We understand existing 415V ACDB is adequate to accommodate the load requirement for extension bays, EPC scope is limited to necessary addition of MCCB feeders in existing panels. Please confirm	Existing 415V ACDB is adequate to accommodate the load requirement for new extension bays but all other necessary equipment for extension of existing AC distribution system including cables, AC distribution panels (if necessary), MCCBs (with spares) and any other equipment necessary to provide AC supplies to all AC loads in the new diameter & SAS connection shall be provided.
28.	Volume 3, GIS Extension - Nutan Bidyut 1N Building Lighting, Small Power, Air Conditioning and Ventilation	Description: Extension of existing lighting system, emergency DC lighting system, LV power supply, ventilation system Bidder's Queries: We understand as any civil extension of existing GIS building is not indicated in scope requirement, hence extension of existing lighting system, emergency DC lighting system, LV power supply, ventilation system is likely not required. Please confirm	The Contractor shall replace the existing lighting system, emergency DC light and ventilation system etc. of GIS hall, as per site requirement during execution.
29.	General	Description: Bidder's Queries: We are considering the Following Make/origin list for Fire Fighting System. Please provide confirmation on the same. 1. Fire Pumping System- Indian Make/Standard (Non Listed) 2. Water Spray System(WSS)- Indian Make/Standard (UL/FM/LPCB Approved) 3. ERW Pipe (Black I Galvanized)- Indian Make/Standard (Non Listed) 4. Fire Alarm System - Indian Make/Standard (Non Listed) 5 Cables-Indian Make/Standard (Non Listed) 6. Fire Extinguishers-Indian Make/Standard (Non Listed)	1. As per tender 2. As per tender 3. As per tender 4. As per tender 5. As per tender
30.	Volume 3, GIS Extension - Nutan Bidyut 1P Earthing and Lightning Protection	Description: One (1) lot of design, supply and installation of earthing system and lightning protection screen Bidder's Queries:	New earthing & DSLP design is required & shall be submitted by successful bidder for approval and shall be finalized during execution stage.

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No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
		We understand existing earth mat along with spacing is to be maintained for present scope at outdoor yard, hence new earthing design is likely not required. Please confirm Please also confirm whether main mat is available for the present scope, else let us know the existing spacing to be considered	
31.	Volume 3, GIS Extension - Nutan Bidyut 1P Earthing and Lightning Protection	Description: One (1) lot of design, supply and installation of earthing system and lightning protection screen Bidder's Queries: Please share the existing DSLP & earthmat layout for clarity in extension	Existing earthmat layout & DSLP are not available to PGCB.
32.	Volume 3, GIS Extension - Nutan Bidyut 1H Control, Protection, Substation Automation & Metering	Description: One (1) lot of Upgradation/extension of existing busbar protection system for 245kV system Bidder's Queries: Kindly confirm the required I/O's in existing Bus Bar relay are available to accommodate the present scope integration requirement, Kindly confirm.	Existing BBP relay is Siemens Siprotec 5 (7SS85). New bays in this scope requires to be equipped with Bay units. Existing I/O are not available.
33.	Volume 3, GIS Extension - Nutan Bidyut 1R SCADA system for Telecontrol and Telemetering	Description: 1H2 One (1) lot of Upgradation/extension of existing Substation Automation System for new diameter with line circuits - Char Fasson 1&2 Bidder's Queries: Present scope is limited to supply of BCU and integration with existing SAS system. Necessary I/O cards are assumed to be available in existing SAS system so as to accommodate the present extension scope requirement. Please also specify the hardware upgradation requirement if any to be considered.	Present scope is limited to supply of BCU and integration with existing SAS system. Existing SAS is siemens. Existing BCU is 7SJ85

No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
34.	Volume 3, GIS Extension - Nutan Bidyut 1R SCADA system for Telecontrol and Telemetering	Description: One (1) lot of complete design, supply, delivery, installation, testing & commissioning of hardware and software to provide the telecontrol & telemetering facilities required at the existing National Load Despatch Centre (NLDC) at Rampura and backup station at Siddhirganj for integration of complete new 230/33kV substation Bidder's Queries: We understand EPC scope is limited to CRP, Bus Bar & SAS integration at Nutal Bidyut station only, required integration/interface support at existing NLDC and Backup substation shall be in scope of EPC without any supply of hardware/software or upgradation. Please confirm	Your understanding is not correct. Integration of two new line bays with NLDC station and Back-up station including supply of hardware/software (if required) is under scope of this contract. Please refer to 1R1 of Schedule A of Volume 3
35.	Volume 3, GIS S/s-Char Fasson 33kV Station Power System	Description: Provision shall be kept for remote control from NLDC for at least 4 Nos 33kV outgoing feeders. Bidder's Queries: Required gateways with suitable interface at local end is considered as part of supply scope, any ind of upgradation/integration at NLDC, backup sub-station is not envisaged, please confirm	Necessary upgradation/integration at NLDC & Backup shall be considered as part of scope and Shall be submitted by successful bidder for approval.
36.	Volume 2 & 3, GIS Extension - Nutan Bidyut & GIS S/s-Char Fasson	Description: Creepage Bidder's Queries: We understand creepage for both sub-stations 25mm/kV to be considered, please confirm	Your understanding is incorrect. Please refer to GTP of GIS substation (Schedule E of Volume 3).
37.	Volume 2 & 3, GIS Extension - Nutan Bidyut & GIS S/s-Char Fasson	Description: RTV Coating Bidder's Queries: We understand RTV coating is not required for any of the porcelain equipments, kindly confirm	Please refer to 4.9 of volume 2 (Terminal Bushing & Connections)

No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
38.	Volume 2 & 3, GIS Extension - Nutan Bidyut & GIS S/s-Char Fasson	Description: Galvanising Thickness Bidder's Queries: We understand weight of zinc coating for equipments & structures to be considered as 610 gm/mm2, kindly confirm	Please follow the bidding document.
39.	Volume 2 & 3, GIS Extension - Nutan Bidyut & GIS S/s-Char Fasson	Description: Outgoing Line side Tension Insulators and hardware Bidder's Queries: We understand Outgoing Line side Tension Insulators and hardware at both sub-station gantry take off are not in EPC scope of supply, kindly confirm	The slack spans including overhead earth wires between the Terminal tower and the substation gantry structures shall be supplied and terminated by the overhead line contractors. All required insulators and hardware's shall also be supplied by the overhead line contractor. Eyebolts/U-bolts or other suitable fixtures for terminating the slack spans on the switchyard gantry shall be provided under the substation Contract (Contractor under this Contract)
40.	General	Description: Bidder's Queries: We understand that different makes of equipment shall be acceptable for both of the substation (i.e. Char Fasson and Nutan Bidyut). Please confirm that our understanding is correct.	Your query is not clear. Please follow the terms and conditions of the bidding document.
41.	Price Schedule-1, S.No-2L3	Description: Bidder's Queries: Please provide the detailed specification & details of Scissor Lift: Battery type for min. two persons. Maximum working high greater than 10m.	Shall be submitted by successful bidder for approval and shall be finalized during execution stage.

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No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
42.	Price Schedule-1, S.No-2L4	Description: Bidder's Queries: Please provide the detailed specification & details of Electroscopes for 230kV & 33kV voltage levels (2 sets for each voltage levels)	Shall be submitted by successful bidder for approval and shall be finalized during execution stage.
43.	Price Schedule-1, S.No-2L6	Description: Bidder's Queries: Please provide the specification & GTP of Diesel Generator with capacity of 250kW	Shall be submitted by successful bidder for approval and shall be finalized during execution stage.
44.	Price Schedule-1, S.No-2L6	Description: Bidder's Queries: We presume that, Generator power supply shall be fed for dedicated ACDB panel. Please confirm the requirement.	Yes, but signals / status etc. of generator shall brought to the dedicated ACDB panel & necessary equipment/connection shall also be done for generators integration in SAS.
45.	Price Schedule-1, S.No-2N2	Description: Bidder's Queries: Please provide the specification & GTP of surveillance system (CCTV) including camera requirements	Please refer to 13.34 of Volume 2 and Schedule E of Volume 3.
46.	Price Schedule-1, S.No-3.2.17.1	Description: Bidder's Queries: Please provide the specification of SF6 Gas Treatment Plant (DILLO)	Shall be submitted by successful bidder for approval and shall be finalized during execution stage.

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No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
47.	Price Schedule-1, S.No-3.2.17.2	Description: Bidder's Queries: Please provide the make and specification of SF6 Gas Cylinder	Shall be submitted by successful bidder for approval and shall be finalized during execution stage.
48.	Price Schedule-1, S.No-3.2.17.3	Description: Bidder's Queries: Please provide the make and specification of Handheld SF6 gas leakage detector (alarm with proportional sound pitch)	Shall be submitted by successful bidder for approval and shall be finalized during execution stage.
49.	Price Schedule-1, S.No-3.2.17.4	Description: Bidder's Queries: Please provide the specification of Infrared type SF6 gas leakage detector (FLIR)	Shall be submitted by successful bidder for approval and shall be finalized during execution stage.
50.	Price Schedule-1, S.No-3.2.17.7	Description: Bidder's Queries: Please provide the make and specification of Contact resistance measurement test set (suitable for measurement down to 1 μ ohm at 10A d.c.)	Detail design shall be submitted & finalized during execution stage.
51.	Price Schedule-1, S.No-3.2.17.8	Description: Bidder's Queries: Please provide the make and specification of 5kV insulation resistance test set (range 0.5 – 1.0 - 2.5 - 5 kV)	Detail design shall be submitted & finalized during execution stage.

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No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
52.	Price Schedule-1, S.No-3.2.17.9	Description: Bidder's Queries: Please provide the specification of Thermovision Camera (FLIR)	Detail design shall be submitted & finalized during execution stage.
53.	Price Schedule-1, S.No-3.2.17.10	Description: Bidder's Queries: Please provide the make and specification of Oil Insulation Tester (Breakdown voltage)	Detail design shall be submitted & finalized during execution stage.
54.	Notun Biddut S/S Price Schedule-1, S.No-1B6.1.1	Description: Bidder's Queries: Please Provide the Conductors Type, Details & GTP of 230kV switchyard.	Please refer to 1B6, 2B9, 2D6 of Schedule A of Volume 3 and corresponding items in 19.19 in Volume2 and accordingly GTP of corresponding items shall be filled up by bidder. This shall be finalized during execution stage.
55.	Notun Biddut S/S Price Schedule-1, S.No-1J1	Description: Bidder's Queries: Please provide the Control cables size to be used for 230kV systems.	Detail design shall be submitted & finalized during execution stage.
56.	Notun Biddut S/S Price Schedule-1, S.No-1J1	Description: Bidder's Queries: Please provide the LV power cables size to be used for 230kV systems.	Detail design shall be submitted & finalized during execution stage.
57.	Notun Biddut S/S Price Schedule-1, S.No-1P1	Description: Bidder's Queries: Please provide the existing earth mat layout, grid spacing and conductor	Please refer to reply against query no. 30 & 31.

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No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
		details for 230kV switchyard	
58.	Notun Biddut S/S Price Schedule-1, S.No-1P1	Description: Bidder's Queries: Please provide the Existing Lightning protection details for 230kV switchyard	Existing DSLP details is not available to PGCB. Detail design shall be submitted & finalized during execution stage.
59.	Notun Biddut S/S Cable Trench spacing	Description: Bidder's Queries: We understand that existing cable trenches have space for present scope bay cables. Kindly confirm.	New cable trench required for new bays.
60.	Notun Biddut S/S LT auxiliary Supply	Description: Bidder's Queries: We understand that LT aux supply are available as per spec. Hence, we need to consider only cable feeder for present scope bays aux supply. kindly confirm	In Char Fasson LT aux. transformer shall be considered in scope but in Nutan Bidyut it is already available.
61.	Notun Biddut S/S CRP panles	Description: Bidder's Queries: We understand that present scope bays control panels shall be located in the existing control room building. Kindly confirm.	Yes. However, the bidders are requested to visit the site for clear understanding.

No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
62.	Notun Biddut S/S Existing GIS hall	Description: Bidder's Queries: Please provide the existing GIS hall and control room building drawing.	Please refer to drawings - PGCB/Section/230kV/Nutan Bidyut and PGCB/Layout/230kV/Nutan Bidyut in "Volume 2 -- Drawings only" documents. If additional information needed, Site visit shall be done by prospective bidders & such data shall be collected by bidder from Nutan Bidyut authority.
63.	Notun Biddut S/S Earthing Risers	Description: Bidder's Queries: Please provide the details of earthing risers being used in this substation for equipment earthing.	Detail design shall be submitted & finalized during execution stage.
64.	Notun Biddut S/S 230kV GIS GAD drawing	Description: Bidder's Queries: Please provide the existing 230kV GIS GA drawings of Siemens, India make.	Existing GIS is Siemens, India make which has already mentioned in the bidding document. However, the bidders are requested to visit the site for more information.
65.	Notun Biddut S/S 220V DCDB	Description: Bidder's Queries: Please provide the drawings of existing 220V DC Distribution panel for extension work.	Site visit shall be done by prospective bidders & such data shall be collected by bidder from Nutan Bidyut authority.
66.	Notun Biddut S/S 48V DCDB	Description: Bidder's Queries: Please provide the drawings of existing 48V DC Distribution panel for extension work	Site visit shall be done by prospective bidders & such data shall be collected by bidder from Nutan Bidyut authority.

No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
67.	Notun Biddut S/S ACDB	Description: Bidder's Queries: Please provide the drawings of existing 415V or 240V AC Distribution panel for extension work	Site visit shall be done by prospective bidders & such data shall be collected by bidder from Nutan Bidyut authority.
68.	Notun Biddut S/S Adaptation of existing control building	Description: Bidder's Queries: complete civil works and facilities for adaptation of existing control building, to accommodate the equipment which is in the scope of work, including finishing works like rendering, painting, floor finishing, etc. Nutan Bidyut Power Plant is an existing site, therefore, we understand that, ample space is available for 230kV GIS equipment and CRP Panels. Further, bidder's scope is limited up to the minor civil work required for present supplied equipments only. Please confirm.	Generally, yes. But any kind of civil works whether minor or major shall have to be done (for accommodating new equipment/connections etc.) by contractor if situation demands without any additional cost and shall be finalized during execution stage.
69.	Notun Biddut S/S Bus Module Extension	Description: Bidder's Queries: Whether the existing 230kV GIS bus extension module is available or not. Please confirm. If available, please provide the drawing.	Existing GIS is Siemens, India make which has already mentioned in the bidding document. As per bid requirement extension shall be from same manufacturer & same model. The bidders are requested to visit the site to know about the existing arrangement. Bus extension module shall be supplied by the Contractor under this contract if required.
70.	Volume 1 of 3, Section -1, Instructions to bidders, A General, 1. Scope of bid, pg 1 of 3	Description: Bidder's Queries: Request to please provide the detailed scope of work for civil works for Char Fasson S/S and Nutan Bidyut Bay extension S/S to have better understanding.	Detail scope of works already mentioned in Volume 3 of 3 of the bidding document. The bidders are requested to read carefully the bidding document for clear understanding.

No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
71.	Volume 3 of 3, Schedule of rates and prices : Civil works, Building and foundation; Item 2M	Description: Bidder's Queries: We understand that site surveying and soil investigation is in scope of work for Char Fasson S/S. Please confirm and if our understanding is correct may include the same in schedule of civil works, building and foundation.	Your understanding is correct. However, Price against such items shall deem to be included in the overall Contract price.
72.	Volume 2 of 3, Technical specification - 10A Buildings and Civil Engineering works, Cl. 10A.3.3, Drainage. Pg 16	Description: Bidder's Queries: In the referred clause, please confirm the type of open channels, concrete or brick.	It will be finalized during contract execution stage.
73.	Volume 2 of 3, Technical specification - 10A Buildings and Civil Engineering works, Cl. 10A.3.22, Transformer Bases. Pg 26	Description: Bidder's Queries: Please confirm if wall type foundation can be provided for Transformer base.	Please follow the bidding document.
74.	Volume 3 of 3, Schedule of rates and prices : Civil works, Building and foundation, Item 2M3.11.4 : 1.5 m walk way	Description: Bidder's Queries: Please confirm where walkway of 1.5 mts wide is required for Char Fasson S/S.	As per price schedule it is under scope of work. Actual position of walkway shall be finalized in execution stage.

No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
75.	Volume 2 of 3, Tender drawings	Description: Bidder's Queries: Please provide the drawing for Fencing Gate.	Detail design shall be finalized during execution stage.
76.	Volume 2 of 3, Tender Drawing : Layout of 230/33kV Char Fasson S/S	Description: Bidder's Queries: As per the referred tender layout we envisage Bus Ducts from GIS Building. Please confirm how the foundations for these Bus Ducts are measured and paid.	GIB/GIL length is measured & paid in meters, and anything else required for installing them (for example: foundation & structures etc.) shall also under scope of this contract and the cost against such items (foundation, structure etc..) shall deemed to be included in the overall Contract price.
77.	Volume 3 of 3, Schedule of rates and prices ;Civil works, Building and foundation, Item 2M1.2.1 and 2M3.7 and Volume 2 of 3, Tender Drawing : Section of 230/33kV Char Fasson S/S (A-A part 01 of 03)	Description: Bidder's Queries: From the references we understand that to cater for level difference in the periphery of the plot, slope protection with turfing shall be provided and Security boundary wall without retaining wall shall be provided.	Please follow the bidding document.
78.	Volume 3 of 3, Schedule of rates and prices: Civil works, Building and foundation ; Item 2M3.22	Description: Bidder's Queries: 3 No.s of Pump Sheds and water reservoirs are not shown in the layout. May confirm the scope. If in scope please provide the pump shed and reservoir drawing.	It is the contractor's responsibility for detail design which shall be submitted to PGCB & will be finalized during execution stage.

No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
79.	Volume 3 of 3, Schedule of rates and prices, Civil works, Building and foundation, Item 2M6 : Diesel Generator room	Description: Please furnish the specification or drawing for Diesel Generator room. Bidder's Queries:	Detail design shall be submitted & finalized during execution stage.
80.	Volume 3 of 3, Schedule of rates and prices : Civil works, Building and foundation; Item 1M	Description: Bidder's Queries: We understand that soil investigation and site grading is not in scope of work for Nutan Bidyut S/S extension. May please confirm the same. If so may please furnish the existing soil report or provide the existing foundation drawings. Also may please confirm and the amount of cutting/filling in the extension area.	The Soil investigation report of existing Notun biddut S/S is not available in PGCB. Soil investigation and site grading in Notun biddut S/S is under scope of this Contract and the cost against this item shall deemed to be included in the overall Contract Price. The bidders are also requested to visit the site and shall assess the quantity/amount of cutting/filling in the extension area by their own responsibility.
81.	Volume-3, Price Schedule-1, Clause 1M4	Description: Bidder's Queries: As per referred clause, "Upgradation/extension of existing fire alarm & fighting system" is required. However as per Tender document, We understand that, there is no new building in present scope & we have to place all equipment with existing building only. So, there shall not be any scope of Fire Fighting System under present scope. Hence, we request you to please confirm the same & revise the price schedule accordingly.	Upgradation/extension of existing fire alarm & fighting system shall be considered in scope. Any items required (whether small or big) shall be supplied for this upgradation/extension, depending upon the existing system. Detail design shall be submitted & finalized during execution stage.
82.	Volume-3, Price Schedule-1, Clause 1M4	Description: Bidder's Queries: If Upgradation/extension of existing fire alarm & fighting system is under present scope, Please clarify the following Points: 1. In which room or Building, Upgradation/extension of existing fire alarm	1. In GIS, control / relay room, battery, DFDR or any room or adjacent to the GIS hall. 2. Site visit shall be done by prospective bidders & such data shall be collected by bidder from Nutan Bidyut authority. 3. Detail design shall be submitted & finalized during

Clarification-1_Chafasson SS_Package-6_STGEP

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No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
		& fighting system is required. 2. Type (Conventional or Addressable type), Make & model of Existing Fire Alarm 3. Please provide the Existing drawing of Fire Alarm System. 4. We understand that, Existing Fire Alarm Panel/Annunciation Panel is having Spare loop/window to integrate the fire alarm devices under present scope. So, we will not consider any new Fire Alarm panel. Please confirm. 5. Type of Fire Protection System to be provided under present scope. we understand that Only fire extinguisher are required. Please confirm	execution stage. 4. If Upgradation/extension of existing fire alarm & fighting system requires new alarm/annunciation panel, then it shall be considered in scope. Site visit shall be done by prospective bidders & such data shall be collected by bidder from Nutan Bidyut authority. 5. As per requirement of existing system of Nutan Bidyut.
83.	Volume-3, Price Schedule-1, Clause 1N1	Description: Bidder's Queries: As per referred clause, "air conditioning system (split type, 4.5 Ton each), ventilation system" is required. However as per Tender document, We understand that, there is no new building is in present scope & we have to place all equipment under withing existing building only. So, there shall not be any scope Air Conditioning & Ventilation System under present scope. Hence, we request you to please confirm the same & revise the price schedule accordingly.	Air conditioning system shall be considered as part of scope. Calculation (considering existing & new air coolers) shall be submitted showing number of new air cooler needed depending upon the additional head generated by new equipment.
84.	Volume-3, Price Schedule-1, Clause 1N1	Description: Bidder's Queries: if air conditioning system & ventilation System is in present scope, Please clarify in which room Air conditioning & Ventilation System shall be provided.	Detail design shall be submitted & finalized during execution stage.
85.	General Scope Clarification	Description: Bidder's Queries: We understand that there is no scope related to EOT Crane in GIS hall &	EOT crane is not in scope for Nutan Bidyut.

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No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
		Existing Crane Capacity is sufficient to take care the GIS Equipment under present scope.	
86.	Existing EOT Crane	Description: Bidder's Queries: Please provide the Details of Existing EOT Crane (Capacity, Hook Height etc.) & GA drawing	For Notun Bidut S/S, supply of EOT crane is not in scope. For Charfasson substation, EOT crane shall be supplied as per bid requirement and the detail design shall be submitted & finalized during execution stage.
87.	Volume 2, Section 13, Clause 13.31.2	Description: Bidder's Queries: Air Cooled Split System Air Handling Units is mentioned in TS which require additional AHU room. We are considering the Ductable split with Ducting/Hi-wall type split AC units/Cassette Type AC which suffice the system design and have less maintenance cost and running cost. Pls confirm.	Air Handling Unit room is not required. Please follow the requirements of bidding document. Detail design & calculation of Air cooler shall be submitted & finalized during execution stage.
88.	Volume 2, Section 13, Clause 13.31.2	Description: Bidder's Queries: Air- Conditioning heat load calculation shall be done, on the basis of max site temperature and unit will satisfactory work up to ambient temperature i.e. 50 deg C. Please confirm	Please follow the bidding document.
89.	Volume 2, Section 13, Clause 13.31.2	Description: Bidder's Queries: We understand that No Heating system is envisaged for this tender. Please confirm	No separate heating unit is required.

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No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
90.	Volume 2, Section13, Clause 13.31.3	Description: Bidder's Queries: We understand that, Exhaust Fan shall be propellar type. Please confirm	Detail design shall be submitted & finalized during execution stage.
91.	Volume 2, Section13, Clause 13.31.3	Description: Bidder's Queries: We Understand that Exhaust Fan with Cowl & Bird/Insect Screen shall be provided for 220 KV GIS Hall. Please Confirm.	Detail design shall be submitted & finalized during execution stage.
92.	General Scope Clarification	Description: Bidder's Queries: Since Fast De[pressurization System, Water Mist System & CAFS System is not mentioned in the price schdule, we understand relavant clauses mentioned in Volume-2 stands void regarding the same.	Your understanding is correct.
93.	Volume-II, SECTION-4- Clause no. 4.12.5	Description: Bidder's Queries: As per Clause no. 4.12.5, The pressurizing air vessel is to be designed for a minimum spraying time of 20 minutes. However, please note that, Pressurizing Vessel shall be provided to minimize the no. of Start- Stop of Jockey Pumps. The size of Pressurizing vessel shall be decided to meet water demand due Minor leakage through various Flanges, Joints etc. in Fire Pipe Network & the same shall not be decided based on Spraying Time. If we consider Fire Water Storage Tank for 1 hr. operation of HVWS System for Transformer as per NFPA, then Further storage of 20 min. spraying time for pressurizing Vessel is not required at all. Also note the 20min Spraying time Storage will be huge Size, over design & unnecessary add to the cost of Project. Hence, we request you to check & revise this clause.	Detail design shall be submitted & finalized during execution stage

Clarification-1_Charfasson SS_Package-6_STGEP

No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
94.	Volume-II, SECTION-4- Clause no. 4.12.5	Description: Bidder's Queries: As per Clause no. 4.12.5, For, quality and maintenance requirement, the Watery Spray System (WSS) shall be from Europe/USA/Canada/Japan origin. We want to propose Indian Make Water Spray System Equipment of equivalent Standard with UL/FM Approved equipment to ensure Quality & Maintenance requirements. Request you to provide your confirmation for the same.	As per requirements of the bidding document.
95.	Volume-III- SCHEDULE-1, Clause no. 2M8	Description: Bidder's Queries: As per referred clause of Price Schedule, "One (1) lot of complete design, supply and construction of fire alarm & firefighting system for other areas. Fire extinguishers shall be supplied as per relevant sections Volume 2 of 3, for main control building and outdoors" shall be provided. We understand that, following Fire Fighting System shall be considered as per Technical Specification: 1. Water Spray System for Transformers 2. Fire Detection & Alarm System for GIS cum Control Building only. Same shall not be provided for Ansar Barack, Guard House, Store cum Dormitory Building 3. Portable Fire Extinguisher as per relevant sections Volume 2 of 3 etc.	1. Yes 2. Shall be considered in scope for all floors of GIS building and all other major civil installations like: each floor of dormitory cum store building, anser barrack etc. 3. Yes, but detail design shall be submitted & finalized during execution stage
96.	Volume-III- SCHEDULE-1, Clause no. 2M8	Description: Bidder's Queries: We understand that, Addressable type Fire Detection & Alarm System	Detail design shall be submitted & finalized during execution stage

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No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
		shall be considered.	
97.	General Scope Clarification	Description: Bidder's Queries: We understand that, Air Sampling System & LHS Cable shall not be envisaged for this tender. Please confirm	Please follow the requirements of the bidding document.
98.	General Scope Clarification	Description: Bidder's Queries: We understand that, Hydrant system is not envisaged for this tender, as the same is neither mentioned in TS nor in price schedule, so we are not considering the same. Please confirm	Please follow the requirements of the bidding document.
99.	Tender Layout	Description: Bidder's Queries: Fire Water Pump House & Tank location is not shown in the Tender Layout. Also, there is no tender drawing provided for Fire Water Pump House & Tank. Please indicate the same in Layout & provide tender drawing for the same.	Provided layout is bidding purpose only. Detail layout & design shall be prepared by the Contractor and submitted to PGCB for finalization during execution stage.
100.	General	Description: Bidder's Queries: We will consider Above ground Fire Water Tank to maintain Flooded (Positive) Suction of Fire Water Pumps. Please confirm	Detail design shall be submitted & finalized during execution stage.

No.	Volume / Section / Clause / Item / Page/Reference	Description and Queries of Prospective Bidders	Reply (PGCB)
101.	General	Description: Bidder's Queries: We are considering the Following Make/origin list for Fire Fighting System. Please provide confirmation on the same. 1. Fire Pumping System- Indian Make/Standard (Non Listed) 2. Water Spray System(WSS)- Indian Make/Standard (UL/FM/LPCB Approved) 3. ERW Pipe (Black I Galvanized)- Indian Make/Standard (Non Listed) 4. Fire Alarm System - Indian Make/Standard (Non Listed) 5 Cables-Indian Make/Standard (Non Listed) 6. Fire Extinguishers-Indian Make/Standard (Non Listed)	6. As per tender 7. As per tender 8. As per tender 9. As per tender 10. As per tender

 