MINUTES OF PREBID MEETING FOR PACKAGE G

MINUTES OF PRE-BID MEETING HELD ON:	**25.07.2023**
NAME OF THE PROJECT	**ASSAM INTRA-STATE TRANSMISSION SYSTEM ENHANCEMENT PROJECTS**
FUNDING AGENCY	**ASIAN INFRASTRUTURE INVESTMENT BANK (AIIB)**
NAME OF THE WORK	CONSTRUCTION OF 400/220KV, 2X500 MVA; 220/132KV, 2X160MVA AND 132/33KV GIS AT RANGIA (KUMARIKATA) ALONG WITH THE ASSOCIATED TRANSMISSION LINES WITH BAY EXTENSION WORKS AT EXISTING 132/33KV NALBARI GSS (Pkg-G)
BID NO. ICB	**AEGCL/MD/AIIB/PACKAGE-G/2022/01-G**

OPENING REMARKS:

Sri. L. Choudhury, Chief General Manager (PP&D), AEGCL extended a warm welcome to all the prospective bidders and introduced his team.

The Chief General Manager (PP&D), AEGCL briefed on the components included in the concerned Package-G and explained the project's scope and further requested the prospective bidders to table their most prioritized queries. AEGCL assured the prospective bidders that comprehensive reply/clarifications shall be prepared and uploaded in the AEGCL site as well as e-tender portal in response to their raised queries on the bid document.

NAMES OF TENDER QUERIES FINALIZATION COMMITTEE MEMBERS:

1. FROM EMPLOYER:

1. Sri. L, Choudhury, Chief General Manager (PP&D), AEGCL, Paltanbazar, Guwahati-01.
2. Sri. P. Bordoloi, Chief General Manager, LAR (O&M), AEGCL, Paltanbazar, Guwahati-01.
3. Sri. G. Bhuyan, Chief General Manager, CAR (O&M), AEGCL, Paltanbazar, Guwahati-01
4. Sri. B. Basumatary, Chief General Manager, UAR (O&M), AEGCL, Paltanbazar, Guwahati-01
5. Sri. Dulal Chandra Das, CGM, T&C & Communication, AEGCL, Narengi, Guwahati-26
6. Sri. Paresh Kr. Barman, CGM, F&A, AEGCL, Paltanbazar, Guwahati-01
7. Sri S.K. Saikia, General Manager (P&D), AEGCL, Narengi, Guwahati-26
8. Sri H. Hashmi, Deputy General Manager-II, O/o the MD, AEGCL, Paltanbazar, Guwahati-01
9. Smt A. Das, Deputy General Manager-I, O/o the MD, AEGCL, Paltanbazar, Guwahati-01
10. Sri. R. Khargaria, Deputy General Manager, LAR, MRT, AEGCL, Narengi, Guwahati-26
11. Sri. H. Gogoi, Deputy General Manager (P&E), AEGCL, Narengi, Guwahati-26.
12. Sri Ankur Pratim Das, Deputy General Manager (P&E), AEGCL, Narengi, Guwahati-26
13. Sri David Bathary, Deputy General Manager (Civil), O/o the MD, AEGCL, Paltanbazar, Guwahati-01
14. Sri. K. N. Baishya, Deputy General Manager (F&A), AEGCL, Paltanbazar, Guwahati-01.
15. Sri. D. Chanda, Assistant General Manager-I, O/o the MD, AEGCL, Paltanbazar, Guwahati-01.
16. Sri. D. Chakraborty, Deputy Manager (Law) O/o the MD, AEGCL, Paltanbazar, Guwahati-01.

2. FROM PROSPECTIVE BIDDERS:

A. BIDDERS THAT WERE PRESENT AT THE PRE-BID MEETING :

1. Mr. Subrata Paul, GM(Sales) and Mr. Satyabrat Das, M/s Hyosung.
2. Mr. D.N Bhatacharjee, Project Manager, M/s Siddhartha Engineering Ltd.
3. Mr. J. Tarafdar, M/s KEC India Ltd.
4. Mr. Abhijeet Sahu and Mr. Vishal Sanghri, M/s TBEA.
5. Mr. Akshay Rudra and Mr. Sagar Vala, M/s L&T.
6. Mr. Santanu Kabiraj, M/s Bajaj Electricals Ltd.
7. Mr. Ravi Ranjan Singh, M/s Gupta Power Infra Ltd.
8. Md Najimuddin, M/s RS Infra Ltd
9. Mr. Dipam Bhattacharjee, M/s Siemens.
10. Mr. Ananad Gaurav, M/s Transrail
11. Mr. J.T. Mhanta, M/s Hitachi Energy.
12. Mr. G. Saha and Mr. Asish Kr. Ojha, M/s Shyama Power India Ltd

B. Bidders that submitted queries but did not attend the pre-bid meeting:

1. M/s Kalpataru India Ltd.Mumbai.
2. M/s Rahul Cables, Pune
3. M/s GR Infra Projects Ltd, Gurgaon
4. M/s Jackson India Ltd, Noida, UP.
5. M/s Skipper Ltd, Kolkata, W.B.

QUERIES ON BID DOCUMENT (INSTRUCTIONS TO BIDDERS, BDS, GENERAL CONDITIONS, PC ETC.)

TABLE-1(A): VOLUME-1

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
Section 2: Tender Data Sheet					
1	Volume 1, Clause 7.3	The Contractor agrees to supply spare parts for a period of years: Ten (10) Years	Since mandatory spare parts are not mentioned in line schedules, we understand that undertaking for supply of spare parts is not applicable for line items.	No Change. As per bid	
2	Section 2: Tender Data Sheet (TDS): ITT 11.2 (k)	**Tender Clause:** The Tenderer shall submit with its bid the following additional documents: 2. Type Test Certificates	**Bidder Query:** In the online submissions, limited data space will be available in the tender website portal. Each GIS suppliers Type test report will be more than 1GB. Since Multiple suppliers are allowed, it is not possible to upload complete report. Hence, we shall submit the Summary of type test report in the tender portal and the complete type test report shall be submitted during detail Engineering stage after award of contract. Kindly accept our request and confirm	Yes	
3	Section 2: Tender Data Sheet (TDS): ITT 16.1 (b)	**Tender Clause:** The period following commissioning of plant and services in accordance with provisions of the contract shall be 10 years.	**Bidder Query:** (i)We presume that the undertaking is required from manufacturer of GIS at the time of vendor approval. please confirm. (ii)Please note that all the inventories are generally kept by the Manufacturers and not by the contractor. Hence, we request that the undertaking shall be provided by the supplier/ Manufacturer at the time of drawing approval for the main supply materials like GIS, Transformers, CRP and SAS only. Please confirm.	i. Yes during bidding. ii. Undertaking for supplying spares shall be provided for spares during bidding.	
Section 3: Evaluation and Qualification Criteria					

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
4	2.3.2 Average Annual Turnover	Minimum average annual turnover of 77 MUSD (Thirty-Three Million USD) or ₹ 600Cr Crore (Rupees Six Hundred Crore) calculated as total certified payments received for contracts in progress or completed, within the last five (5) years. JV requirement: Each Partner: 20% **Lead Partner: 80%**	Minimum average annual turnover of 77 MUSD (Thirty-Three Million USD) or ₹ 600Cr Crore (Rupees Six Hundred Crore) calculated as total certified payments received for contracts in progress or completed, within the last five (5) years. JV requirement: Each Partner: 20% **Lead Partner: 60%**	No Change. As per bid.	
5	2.3.3 Financial Resources	The Joint Venture must demonstrate that the combined financial resources of all partners defined in FIN- 3, less all the partners' total financial obligations for the current contract commitments defined in FIN-4, meet or exceed the total requirement of 51 MUSD (Fifty-One Million USD) or ₹ 400 Crore (Rupees Four Hundred Crore) only. JV Requirement: Each Partner:20% **Lead Partner:80%.**	The Joint Venture must demonstrate that the combined financial resources of all partners defined in FIN- 3, less all the partners' total financial obligations for the current contract commitments defined in FIN-4, meet or exceed the total requirement of 51 MUSD (Fifty-One Million USD) or ₹ 400 Crore (Rupees Four Hundred Crore) only. JV Requirement: Each Partner:20% Lead **Partner: 60%**	No Change. As per bid.	
6	2.4.1 (a): Contracts of Similar Size and Nature : form EXP-1 : PART-A (For 400/220/132 kV Gas Insulated Substation)	The tenderer must have designed, supplied, erected, tested & commissioned GIS including Civil works complete at least One Gas Insulated sub- station of 400 KV or above voltage class.The above credential shall be from any state/ central power utility and the same should have been in successful operation for at least one year within last 5(five) years as on the originally schedule date of bid opening.	The tenderer must have designed, supplied, erected, tested and commissioned GIS including Civil works complete at least One Gas Insulated Substation of 400 kV or above voltage class. The above credential shall be from any **state / central / any Power Transmission/Generating utilities and the same should have been in successful operation for at least one year within last 10 years (extended from 7 years through Addendum) as on the originally scheduled date of bid opening**. This is as per the qualification requirements stipulated in the earlier AIIB tenders floated by AEGCL and that to for 132 & 220 KV GIS Tenders. In the last 5 years the world was hit with COVID and the impact on operation was witnessed for more than 2 years. You are requested to change the qualification requirement accordingly.	Refer Addendum	Sl No. 2

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
7	2.4.1 (a): Contracts of Similar Size and Nature : form EXP-1 : PART B: (Associated Transmission Lines for 400kV,220kV and 132kV Voltage Level)	The tenderer shall have executed Turnkey contracts involving design, supply, tower foundation, erection and stringing; and shall have: i. successfully commissioned at least 20 ckt km of length of 400kV or above in a single project over a period of last 5 years, The above work should have been under successful operation# for a minimum period of one year reckoned from the date of bid submission. ii. The bidder shall either have the manufacturing capability of fabricated tower members at his own plant or shall have clear access from other reputed manufacturing plant of fabricated towers (to be supported by legally enforceable documents like MOU and Affidavit regarding Eligibility of the Fabricator) having yearly manufacturing capacity of 9000 MT. Such plant must have manufactured an average of 6000 MT during last three years The proof for the above experience shall be submitted along with the bid. The Bidder should have successfully executed/completed any transmission line project under Central/State Power Utility or TBCB in any one project within 18(eighteen) months during last Seven (7) financial years and the executed value of such project in any One (1) financial year shall not be less than Rs. 100Crore.	We request you to kindly arrange to change/ amend the clause as per following: The tenderer shall have executed Turnkey contracts involving design, supply, tower foundation, erection and stringing; and shall have i. designed & supplied transmission line towers of voltage level 220kv or above . ii. successfully commissioned at least 20 ckt of length of 400kV or above in a single project over a period of last 5 years, The works should have been under successful operation# for a minimum period of one year reckoned from the date of bid submission. iii. The bidder shall either have the manufacturing capability of fabricated tower members at his own plant or shall have clear access from other reputed manufacturing plant of fabricated towers (to be supported by legally enforceable documents like MOU and Affidavit regarding Eligibility of the Fabricator) having yearly manufacturing capacity of 9000 MT. Such plant must have manufactured an average of 6000 MT during last three years. The proof of the above experience shall be submitted along with the bid. The bidder should have successfully executed/completed any transmission line project under central/state power utility' or TBCB in any one project **Within twenty four months** during last seven (7) financial years and executed value of suoh project in any One(1) financial year shall not be lese than 100 Crore. **In addition to the above clause:** "The bidder must have in-house design & development	No Change. As per bid	

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			department and should have their own NABL accredited tower testing facility capable for Testing 400 KV class (or above voltage class) transmission line EHV towers in India and the bidder should have in- house designed & type tested 400kV or higher voltage class transmission line towers and its foundation in the last 7 years as on the date of bid submission. The same shall be in satisfactory operation for a period of 02 years as on the originally scheduled date of bid submission."		
8	2.4.2 Experience in Key Activities Part A: Substation (form EXP-2)	A. The tenderer must have the experience of design, install, test and commission of the following listed equipments which are in successful operation for at least **two year** within last seven year as on the date of original bid submission. i. Atleast 2nos., 400KV class capacity of minimum 500 MVA Power/Auto Transformers, ii. 05(five) nos. GIS circuit breaker bays of 400 kV or above and 40KA short circuit level. iii. Control & Relay Panel and iv. RTU / BCU and Substation Automation System v. Construction of control room building with all civil works complete .	A. The tenderer must have the experience of design**,Supply**, install, test and commission of the following listed equipments which are in successful operation for at least **ONE** year within last seven year as on the date of original bid submission. i. Atleast 2nos., 400KV class capacity of minimum **315 MVA** Power/Auto Transformers, ii. 05(five) nos. GIS circuit breaker bays of 400 kV or above and 40KA short circuit level. iii. Control & Relay Panel and iv. RTU / BCU and Substation Automation System v. Construction of control room building with all civil works complete .	Pl refer Addendum	Sl No.1
9	2.5 (a) Manufacturers/Subcontractor, Page-49	In the case of a Tenderer who offers to supply and install major items of plant under the contract, which the Tenderer did not manufacture or otherwise produce, the Tenderer shall provide the Manufacturer's authorization using the form provided in Section 4 (Tendering Forms), showing that the Tenderer has been duly authorized by the Manufacturer or producer of the related plant and equipment or component to supply and install that item in the Employer's country.	As per our understanding, bidders have to submit Manufacturer's authorization only for major items as listed in Cl. 2.5 (a) (Section 3: Evaluation and Qualification Criteria), i.e., **power Transformer, GIS, control and Relay panel, and Substation Automation system, including RTU / BCU, XLPE Cable, and Transmission Tower Structure,** during the Bidding stage. Please confirm.	Yes.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
10	2.5 (a) Manufacturers/Subcontractor (GIS)	I. The manufacturer should have designed, supplied, erected, tested and commissioned on supply cum erection basis at least 3 (three) nos. GIS installations of 400kV or above voltage level in India during last 7(seven) years having minimum 7 (seven) nos. complete GIS Bays and which should be under satisfactory operation for at least 3 (three) year as on the originally schedule date of tender opening (Certificate of original customer to be submitted). The bidder should list such works executed to substantiate the requirement of this Clause	Request vou to kindlv revise the QR as below• The manufacturer should have designed, supplied,and **supervision** in Erection testing & commissioning **at least 1(One) nos. GIS installations** of 400kV or above voltage level in India during last 7(seven) years having minimum 7 (seven) nos. complete GIS Bays and which should be under satisfactory operation for **at least 2(Two) year** as on the originally schedule date of tender opening (Certificate of original customer to be submitted). The bidder should list such works executed to substantiate the requirement of this Clause. Note- Normally as GIS - Manufacturer, we design & supply the GIS to EPC and supervise the erection testing & commissioning activity.	No Change. As per bid	
11		i. A joint undertaking with the parent company (Holding company) shall be furnished to guarantee equality, timely supply, performance and warranty obligations for a period of 5 (Five) years as specified for the equipment(s) in the parent company's (Holding Company) letterhead, which is required to be submitted at the time of signing/execution of the contract agreement.	i. A joint undertaking with the parent company (Holding company) shall be furnished to guarantee equality, timely supply, performance and warranty obligations for a period of 5 (Five) years as specified for the equipment(s) in the parent company's (Holding Company) letterhead, which is required to be submitted at the time of Bidding.	No Change. As per bid	
12		The Manufacturer shall have to furnish type test report of SF6 gas insulated sub-station equipment duly Designed, Manufactured, tested (as per IEC standard) which, shall not be older than 10 (Ten) years, as on date of tender opening. The language of the type test report should be in English only. Type Test should have been conducted at any of the following internationally accredited testing laboratories. (a) KEMA (Holland) (b) CESI (Italy) (c) CERDA (France) (d) PEHLA (Germany)	The Manufacturer shall have to furnish type test report of SF6 gas insulated sub-station equipment duly Designed, Manufactured, tested (as per IEC standard) which, shall not be older than 15 (Fifteen) years, as on date of tender opening. The language of the type test report should be in English only. Type Test should have been conducted at any of the following internationally accredited testing laboratories. Note - 15 years as per CEA Guide line enclosed. (a) KEMA (Holland) (b) CESI (Italy) (c) CERDA (France) (d) PEHLA (Germany)	Pl refer Addendum	Sl No.3

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
		(e) KERI (S. Korea) (f) CPRI/ERDA (India) (g) Intertek (ASTA), UK (h) ESEF ASEFA, France (i) JSTC, Japan (j) SATS Norway (k) VEIKI, Hungary (m) FGH (Germany) (n) VOLTA (France). (o) STLNA, USA	(e) KERI (S. Korea) (f) CPRI/ERDA (India) (g) Intertek (ASTA), UK (h) ESEF ASEFA, France (i) JSTC, Japan (j) SATS Norway (k) VEIKI, Hungary (m) FGH (Germany) (n) VOLTA (France). (o) STLNA, USA **(p) XIHARI, China**		
13	2.5 (a) Manufacturers/Subcontractor,	In the case of a Tenderer who offers to supply and install major items of plant under the contract, which the Tenderer did not manufacture or otherwise produce, the Tenderer shall provide the Manufacturer's authorization using the form provided in Section 4 (Tendering Forms), showing that the Tenderer has been duly authorized by the Manufacturer or producer of the related plant and equipment or component to supply and install that item in the Employer's country. Failure to submit the Manufacturer's authorization at the first instance is considered a minor, nonmaterial omission and shall be subject to clarification. However, failure of the Tenderer to submit the omitted authorization shall lead to rejection of the Subcontractor or Manufacturer of the item under evaluation in accordance with ITT 35.4	Request you to confirm that the bidder can submit multiple MAF for a single equipment.	Yes.	
14	2.5 (a) Manufacturers/Subcontractor. 1. GIS (Clause IV)	The bidder/manufacturer shall not be currently debarred/blacklisted nationally or internationally from any of the state, central and Govt. or undertaking department.	We presume that the clause need to be reviewed as below: The bidder/manufacturer shall not be currently debarred/ blacklisted nationally or internationally from any of the state, central and Govt. or undertaking department as on date of bid submission.	PI refer Addendum	Sl No.4

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
15	2.5(b) DOCUMENTARY EVIDENCES:	**Clause:** c) As regards documentary proof to substantiate experience requirement in regard to erection work, experience in manufacturing capacity, supply of towers, execution of works and satisfactory operation is concerned, the bidder will have to submit necessary certificates from User Agency clearly specifying the period of experience and other details.**(All the certificates for proof should be attested)**	We understand self attestation is sufficient or if notary attestation is required. Please confirm	Self attestation is sufficient. However, AEGCL may seek clarification/ verification from the USER Agency issuing those certificates	
16	2.5a, Item No.2 - GIS	III. The Manufacturer shall have to furnish type test report of SF6 gas insulated sub-station equipment duly Designed, Manufactured, tested (as per IEC standard) which, shall not be older than 10 (Ten) years, as on date of tender opening. The language of the type test report should be in English only. Type Test should have been conducted at any of the following internationally accredited testing laboratories, (a) KEMA (Holland) (b) CESI (Italy) (c) CERDA (France) (d) PEHLA (Germany) (e) KERI (S. Korea) (f) CPRI/ERDA (India) (g) Intertek (ASTA), UK (h) ESEF ASEFA, France (i) JSTC, Japan (j) SATS Norway (k) VEIKI, Hungary (m) FGH (Germany) (n) VOLTA (France). (o) STLNA, USA	As per referred clause, Type Test for GIS should have been conducted at any of the following internationally reputed testing laboratories, (a) KEMA (Holland) (b) CESI (Italy) (c) CERDA (France) (d) PHELA (Germany) (e) KERI (S. Korea) (f)) CPRI/ERDA (India) (g) Intertek (ASTA), UK (h) ESEF ASEFA, France (i) JSTC, Japan (j) SATS Norway (k) VEIKI, Hungary (m) FGH (Germany) (n) VOLTA (France). (o) STLNA, USA We request AEGCL to accept the type test reports which were also conducted in Manufacturer's own lab or any third party lab & witnessed by representatives from any of the above internationally accredited testing laboratories.	Not accepted.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
17	2.5a, Item No.2 - GIS	In case the type test reports are older than 10 years and there is no change in design of the GIS equipment, the manufacturer shall provide an undertaking declaring that there has not been any change of design of the GIS equipment intended to be supplied. In case any subcomponent of GIS equipment is tested by the sub suppliers, the manufacturer shall submit such test report along with the certificate of the laboratory from the appropriate accreditation authority	As per referred clause, it is mentioned as " In case the type test reports are older than 10 years and there is no change in design of the GIS equipment, the manufacturer shall provide an undertaking declaring that there has not been any change of design of the GIS equipment intended to be supplied. In case any subcomponent of GIS equipment is tested by the sub suppliers, the manufacturer shall submit such test report along with the certificate of the laboratory from the appropriate accreditation authority." In this regard, we are not envisaging any repetition of type tests in bidders scope if there is no change in design of the GIS equipment. Please confirm.	Pl refer Addendum	Sl No.2
18			We request AEGCL to accept type test reports of same or higher rating for the offered Gas insulated switchgear. Please confirm acceptance.	Type test report of Gas Insulated Switchgear shall be submitted on same rating	
Section 4: Tender Forms.					
16	Tables of Adjustment Data (The Price adjustment shall as per IEEMA PV Calculator) Table A - Local Currency	**Tender Clause:** Tenderer's Proposed Weighting a = 0.15	**Bidder Query:** We understand from the tender document, Bidder to follow IEEMA formula only and the weightages are as per IEEMA formula only. please confirm.	Yes.	
Section 7: General Condition of Contract					
17	GCC 44.1-	"If the Contractor fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim.	We seek deletion of this extracted portion of the clause as it is detrimental to contractor's interests.	No change in GCC	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
18	GCC 14. Taxes and Duties	**Clause:** 14.2 Notwithstanding GCC Subclause 14.1 above, the Employer shall bear and promptly pay all customs and import duties as well as other local taxes like, e.g., a value-added tax (VAT), imposed by the law of the country where the Site is located on the Plant specified in Price Schedule No. 1 and that are to be incorporated into the Facilities.	VAT is abolished in India. We under stand that during tender financial evaluation Custom duties and GST will not be considered for evaluation and the same will be paid at actual. Please confirm.	GST will be considered and payment will be as per Payment terms	
Section 8: Special Condition of Contract					
19	SCC 26 :Completion Time Guarantee	Applicable rate for liquidated damages shall not exceed: ½% (half percent) per week. Maximum deduction for liquidated damages: 10 (ten) percent of contract price	We request you to revise the clause as per below: Applicable rate for liquidated damages shall not exceed: ½% (half percent) per week. Maximum deduction for liquidated damages: 5 (Five) percent of contract price	No Change. As per bid	
20	SCC 13: Securities	Not Existing	The partners shall submit BGs for their respective scope of work in case of Consortium/Joint Venture. The banks may deny to safeguard the project value of an other entity.	Performance/Advance Security shall be submitted by the consortium firm only in case of JV. Partly submission shall not be considered.	
21	SCC 13- Securities	Extended guarantee for the GIS equipment shall be for five (5) years beyond the defect liability period of the contract. The amount of the BG shall be 20% of the GIS equipment cost and shall be in Non-Judiciary stamp papers of worth minimum Rs. 100/-. However, BG period may be split up subject to the condition that BG would be extended from time to time to cover the warranty period. Moreover, before one month (i.e. 30 days) of expiry of the BG, renewal is to be done by the contractor, otherwise revocation would be done by AEGCL within claim period.	This is not as per the standard practices adopted in other utilities. GIS manufactures and not willing to provide for such high value of Bank Guarantee. We request to decrease the BG value from 20% to 10% valid for 12 months from the date of commissioning.	No Change. As per bid	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
22	SCC 13. Securities SCC 27. Defect Liability	**Clause:** 13.3.3 For GIS equipment manufactured and supplied from aboard, the contractor shall have to extend the Performance BG within one month prior to expiry of the Performance BG furnished for the main contract to cover the extended guarantee period plus two months as part of the contract performance to cover the Contractor's extended defect liability in accordance with the provision in the SCC, pursuant to GCC Subclause 27.10. Extended guarantee for the GIS equipment shall be for five (5) years beyond the defect liability period of the contract. The amount of the BG shall be 20% of the GIS equipment cost and shall be in Non-Judiciary stamp papers of worth minimum Rs. 100/- However, BG period may be split up subject to the condition that BG would be extended from time to time to cover the warranty period. Moreover, before one month (i.e. 30 days) of expiry of the BG, renewal is to be done by the contractor, otherwise revocation would be done by AEGCL within claim period. The performance security shall not be reduced on the date of the Operational Acceptance	**From the above referred clause and also clause EQC 2.5 for GIS Manufacturer,** We understand that the Extended Guarantee Performance BG is required only for GIS equipment Manufactured and supplied from Abroad and not required incase the GIS equipment are Manufactured and supplied from India. Please confirm.	Pl refer Addendum	Sl NO. 6
Section 9: Contract Forms					
23	Appendix 1:Terms and Procedures of Payment	Advance Payment :Ten percent (10%) of the total CIP amount as an advance payment against receipt of advance invoice subject to release of advance fund from AIIB	We understand that bidder advance payment has no link with advance received from AIIB to AEGCL. Please confirm	Yes	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
24	Appendix-1 Terms & procedures of payment, Schedule-2, Progressive payment for supply items:	(a) 20% supply amount would be paid on completion of 50% of the total erection works of that particular item. (b) Next 10% of the supply amount of that supply item would be payable on completion of 100% of the total erection, testing, commissioning works of that particular item.	We understand that 50% of total erection works of that particular item means erection of 50% of total supplied qty. of that particular item. As final stage payment of 10% (5%+5%) will get released after commissioning. We request not to link commissioning works for this mentioned supply stage payment. Request to release the 10% of supply amount payable on 100% of total erection. This will enable bidder to remove financial cost loading in the project. Please confirm.	No Change. As per bid	
25	Appendix 2: Price Adjustment	No price variation will be allowed on Schedule No.: 4 (Installation and Services)	We request you to revise the clause as per below: Price variation will be allowed on Installation and Services.	No Change. As per bid	
26	Appendix 2: Price Adjustment	**Schedule No.: 2 (Plant and Equipment supplied from inside the Employer's Country) Substation:** 1) Power Transformer 2) Conductor 3) PVC/XLPE Insulated Power Cable **Transmission Lines:** 1) Fabricated Tower members (including Nut & bolts) 2) Conductor 3) Disc Insulators / Long rod Insulators.	We understand that, "Power Transformer" is indicative of All Transformers and Reactors and "PVC/XLPE Insulated Power Cable is indicative of All HT/LT Power & Control Cables as per the BOQ. Also Price Adjustment for Structure and other related equipment as per applicable IEEMA standards. Please clarify.	Price Adjustment will be applicable on the items specified in the tender only	
27	Appendix 2: Price Adjustment	**Tender Clause:** (g)In the price variation formula, base date shall be considered to the indices as on 28 days prior to the date of Bid opening (referred to base date indices). Applicable date shall be considered as on 49 days prior to date of inspection / waival of inspection of the material offered and date of joint measurement sheet whichever is applicable.	**Bidder query:** We understand from the contract clause, bidder to follow IEEMA formula and IEEMA indices only. As per IEEMA formula, the applicable indices date for each component will vary. Hence we request below modification. "Base date and applicable date shall be inline with the IEEMA formula only. Please confirm.	As per IEEMA, Pleaese refer Addendum(Table: 2 Point No. 5)	Sl No.7
General					
28	Supply		We are Transformer manufacturer and we are participating subject tender as an EPC bidder, Please confirm that we can provide our Transformer/Reactor offers to any other EPC bidders as well.	Please refer clause no.4 of the ITT Volume-I	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
29	Joint Venture		Please provide format for enetring Joint Venture with consortium partner	Joint Venture agreement shall be as per Section-2, TDS, ITT 4.1(b). Registered JV agreement shall require during contract signing.	
30	Payment Terms		Please confirm for Payment to consortium partners for their respective scope of work.	Payment shall be made in the name of consortium firm and not partly.	

TABLE-1(B): QUERIES ON TECHNICAL SPECIFICATIONS (VOLUME-2)

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
CHAPTER 2: INFORMATION TO BIDDERS (ITB)					
1	SLD, Clause 2.6 Scope of supply & Works, Page 34	Pre Insertion Resistor (PIR)	In SLD PIR is mentioned. In Technical Specification it is mentioned that PIR will be applicable if mentioned in Bid Proposal Sheet (BPS). In BOQ PIR is not mentioned. We understand PIR is not required. Please confirm.	PIR is not required in this project.	Chapter 2, Sl. No.8
2			As per CEA guideline (attached) CSD can be used instead of PIR. Please inform that whether CSD/PIR is applicable.	CSD shall be used in the individual ICT and reactor bays and their respective tie breaker bays.	Chapter 16, Sl. No.30
3		General	In case of discrepancy between SLD, Technical Specs, BPS, other, we understand that BPS will supersede other. Please confirm our understanding.	Not accepted	
4	Clause No. 2.6.5	Dismantling of the existing structures of Existing erected distribution/transmission system and transportation of these materials to designated location as provided by the employer"	However, as per BPS, supply Rangia and supply N given. Kindly check and issue suitable amendment.	Price to be quoted considering all dismantling work required for the project.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
5	Clause No.2.6.14.2 & Chapter 7:General Technical clauses for design, clause 7.1.2	Following fault levels are mentioned for various voltage levels : 63kA for 1 sec - 400kV 50kA for 1 sec - 220kV 40kA for 1 sec - 132kV 31.5kA for 1 sec - 33kV	However, as per 400/220kV single line diagram & 132/33kV single line diagram same fault levels are mentioned as below : 63kA for 3 sec - 400kV 50kA for 3 sec - 220kV 40kA for 3 sec - 132kV 31.5kA for 3 sec - 33kV As above requirements are contradicting, Please check and confirm the fault duration (i.e. 1s or 3s).	The STC for all equipment shall be as follows: 63kA for 3 sec - 400kV 50kA for 3 sec - 220kV 40kA for 3 sec - 132kV 31.5kA for 3 sec - 33kV	
6	Clause No. 2.6.11		As per referred clause, total 3 nos. of ICT bays are mentioned for 220kV GIS. Further, As per 400/220kV single line diagram (Dwg. NAC/AEGCL/RANGIA/SLD-003) and Rangia plot plan (Dwg. NAC/AEGCL/ RANGIA/PLOT PLAN-002),we understand that 2 nos. of 400/220kV and 1 nos. of 220/132kV ICT bays are under present scope. However, as per BPS line item no. 14.02, supply of 2 sets of 220kV GIS bays for 160MVA transformer and as per BPS line item no. 17.01, supply of 2 sets of 160MVA three phase transformer is mentioned. As the requirements are contradicting, please check and confirm the actual number of 220/132kV ICT bays under present scope.	As per updated BoQ	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
7	Clause No. 2.6.11, 2.6 Scope of supply & works	drawings/documents	Please furnish the following drawings/documents of existing 132kV Nalbari switchyard: a) Existing Layout and SLD(With current ratings, fault ratings, Creepage etc.) of 132 kV AIS. b) Control Building Layout along with sections c) Typical AC/DC SLD d) Existing 132kV Substation Earthing Layout or existing Earth mat spacing. e) Existing 132kV Substation cable Trench Layout f) AC Kiosk / Switchyard panel room layout	During Detailed Engineering	
8	Clause No. 2.6.11, 2.6 Scope of supply & works		Please clarify, whether existing Control Building is adequate for installation of CRP for present scope of bays. Further, We presume that existing 132kV AIS substation has sufficient space to accommodate the extension bays.	Yes	
9	Conductor type & configuration		Kindly confirm the Conductor type & configuration at existing switchyard: a) Main bus b) Equipment bus c) Strung bus	As per site.	
10	Clause 2.6.12.1.d), 220kV GIS Bay description		We would like to inform you that, in SLD it's mentioned that in Bus coupler bay 6 no's of cores, but in technical specification file it's mentioned that 5 No's of cores is required for Bus coupler bay.We considered SLD and please confirm the same.	As per Addendum issued	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
11	2.7.23 (Right of way for transmission line)	AEGCL may agree on extension of time as deemed fit by it for completion of a part of the entire work without levying any Liquidated Damages, if any delay in obtaining clearances & ROW as mentioned above for reasons beyond the control of the Contractor provided that such delay shall not compromise the time schedule for completion of the project as stipulated in Section -3 of Vol-I of this Bid.	We understand that in case of delay in obtaining clearances & ROW for the reasons beyond the control of contractor, contractor will be granted extension of time without the levy of liquidated damages. Please confirm.	As per bid	
CHAPTER 4: PROJECT IMPLEMENTATION					
1	Clause No. 4.12.1	" Provide a list of recommended spare parts (optional spares) together with their individual prices, which will be considered for evaluation.	However, as per clause, 4.12.3, it is mentioned as "**Optional spares** (shall not be considered for **evaluation purpose**". As above both the clauses are contradicting, please check and clarify whether optional spares shall be considered for evaluation or not ? If yes, please provide the list of spares to be consider for the subject project to make uniform for all the bidders.	Only the mandatory spares mentioned in the BoQ shall be considered for evaluation.	
CHAPTER 5: LAND DEVELOPMENT AND ASSOCIATED CIVIL WORKS					
1	Foundation - Filled up soil	General	We proposed to provide the equipment support foundations, and other foundations required a bearing capacity less than 6 T/Sq. m in 95% compacted filled up soil. Please confirm.	All foundations shall be from minimum 500 mm below Original ground level	
2	Slope protection	General	We acknowledge the possibility of needing to construct a retaining wall below the boundary wall due to the presence of filling. However, we propose an alternative solution, which involves implementing slope protection or stone pitching within the boundary area instead of constructing a retaining wall. please confirm.	Alternate solution is not acceptable	
3	Tower & Gantry - Specifications	General	Kindly provide the Factor of safety to be used for Normal and SCF conditions for structure design.	As per bid	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
4	Road	General	Main approach road to substation plot is acknowledged but one culvert is crossing state highway near to substation. So removable of culvert is needed because in rainy season water will come inside substation area.	The water from this culvert shall be diverted by construction of RCC drain and necessary culverts between substation boundary wall and PWD road.	
5	Fencing	General	Please specify the internal fencing and barbed wire fencing	As per attached drawing	
6	FGL	General	We understand that after award of contract, contour survey/ soil investigation to be done and new FGL and other level can be proposed and discussed for final approval.	After award of contract joint survey and soil investigation shall be done but FGL is fixed.	
7	Rerouting of 11 KV line	General	11 kv line shall be dismantled (which is within SS area), please confirm scope regarding this.	Rerouting of 11 kV line shall be done as per BOQ	
8	Building scope	General	Please confirm which buildings are part of current scope which buildings are in future scope. (Remaining GIS and control building is considered as part of tender scope). 1. Guest house/transit camp 2. Staff quarter (G+2) 3. Officer quarter (G+1) 4. Security building - 3 nos. 5. Water tank & pump house- 2 nos. 6. Kiosk building	All buildings considered in BOQ is in present scope of EPC	
9	Soil investigation	General	For the tender BOQ we will consider the attached soil investigation and contour survey.	Yes	
10	Site Clearance	General	In price schedule, there is no separate item for Site Clearance including necessary excavation in hard rock with or without requiring blasting. We trust that the same shall be paid as an additional item if envisaged during execution stage. Kindly confirm if our understanding is correct.	Inclusive in Site clearance item of BOQ	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
11	Cl .no 5.14 SEWAGE SYSTEM & STORM WATER DRAIN		As per the mentioned clause, we understand that ETP and septic tank are bidder scope. However, there is no separate item for ETP,Septic tank in the price schedule. Kindly suggest in which item this shall be claimed or pls include a new item for the same.	Inclusive with RCC buildings	
12	Cl. 5.3 BUILDINGS & GENERAL REQUIREMENTS,	i)Finish Schedule	In specification, finishing schedule for control room building is given. However, finishing schedule for other buildings (i.e: GIS Building, KIOSK Building, RE'S residence building, Officers Quarter G+1,Staff Quarter G+2,Transit camp building, Security barrack, Store room building, Open Store, Security/Guard room (2 nos.) are not given in the specification. Please furnish the same, in order to estimate the finishing quantities for the above buildings.	New Chapter is incorporated	Refer Table-2 Chapter 5, sl no.1
13	T.S- Road & Culverts, cl.no-5.17 (a), pg-105 of 1094	Price schedule :Civil Works -18	As per the referred clause, the technical specification mentioned approach roads, substation roads, and service roads. However, the price schedule only specified the Internal Road. Kindly note that Approach Road is excluded from our scope.	All internal and approach road connecting PWD road are of same specification and covers the said clause. Kindly refer the revised BOQ.	
14	T.S- Road & Culverts, cl.no-5.17 (a), pg-105 of 1094	Price schedule Civil Works -18	As per the referred clause's technical specification, both types of roads are mentioned (concrete and Interlocking cement concrete block roads). Kindly clarify the type of switchyard and residential area to be provided.	All roads are to be with ICBP.	
CHAPTER 6: CHAPTER 6: AIR CONDITIONING SYSTEM					
1	Vol.II, CHAPTER 6: CHAPTER 6: AIR CONDITIONING SYSTEM, Clause No. 6.1		Please provide the detailed specification along with list of rooms to be Air conditioned.	Refer the updated BoQ.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
2	Vol.II, CHAPTER 6: CHAPTER 6: AIR CONDITIONING SYSTEM, Clause No. 6.1 COOLING COIL AND FILTER		As per clause it has been mentioned to provide 3 rows deep coil for split AC units. However as per the availability all OEM's are offering 2 row deep coil only for split AC. Please confirm to consider the same.	As per IS 1391(Part-2):2018 and ISHRAE standard	
3	Vol.II, CHAPTER 6: CHAPTER 6: AIR CONDITIONING SYSTEM, Clause No. 6.2		Please provide the detailed specification along with list of rooms to be considered for ventilation system	Pressurized ventilation system shall be provided for both 400 kV and 220 V GIS Halls. Also, Double door system for positive pressurized room shall be provided at both ends of each GIS hall.	
4	Vol.II, CHAPTER 6: CHAPTER 6: AIR CONDITIONING SYSTEM, Clause No. 6.3		Please provide the detailed specification along with list of rooms to be considered for ducted system.	Ductable AC shall be provided as per BOQ for Control panel room of each GIS building. Refer Addendum	Chapter 6 ,Sl No. 1
5	Price schedule, Supply for Rangia S/s,		Please include Air Conditioning and Ventilation system in Price schedule line item.	Refer the updated BoQ.	
6	General		Please provide the make list for HVAC System	The OEM of AC shall have minimum 10 years experience in NE India/ Guwahati in sales and servicing with office in Guwahati. Presently they shall have experience of AMC for minimum 500T in Govt. departments in ongoing projects.	
7	General		Please provide the make list for HVWS, Hydrant, FDA & extinguishers System.	This system shall be as per NBC-2016, CEA Guide lines for substation and NFPA. The OEM of FDA and extinguisher system shall have servicing in NE region/ Guwahati.	
CHAPTER 7: General technical clauses for Design					
1	Clause No. 7.21.2	Seismic withstand capability of GIS equipment	To prove the Seismic withstand capability of GIS equipment, we shall provide necessary calculations during drawing approval instead of test reports. Please confirm acceptance.	Not accepted. Shall be as per bid. Same is also applicable for GIS equipments.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
2	Clause No.7.21.1 General Conditions of Type Test	"The Contractor shall submit Type Test Reports for all equipment excluding GIS being supplied by him (as per IEC standard) which, shall not be older than five (5) years, as on date of bid opening for AEGCL's approval.	In this regard, we request AEGCL to accept type test reports inline with recent CEA Guidelines.	As per latest CEA guidelines.	
3	Clause No.7.21.2. Mandatory Type Test for GIS Equipment's	"All tests shall be carried out to the satisfaction of AEGCL, in presence of authorized representative of AEGCL, at such reasonable times as AEGCL may require, unless agreed otherwise."	We presume type test reports from specified labs as per VOL-I shall be submitted. we are not envisaging any repetition of type tests and witnessing of the same by AEGCL representatives in our scope of works. Please confirm.	As per bid.	
4	Clause No.7.27 EARTHING SYSTEM	"The earthing system shall comprise a mesh grid formed by hot dip galvanized iron flat bar (GI flat) of 75 X 12 mm(for 220/132 KV & 132/33 KV) and 40 mm MS rod (for 400 KV) buried directly in the ground.	However as per BPS, sr. no. 18.011, 40 mm MS rod is mentioned for main earth mat. As both the clauses are contradicting, we understand that bidder to consider 40 mm MS rod for main mat inline with BPS for present scope of work only. Please confirm. Further, kindly clarify the following regarding earthing of 132kV Nalbari S/s: a) Is main earth mat already laid in extension area of 132kV bays b) If already laid, please furnish the spacing and existing 132kV Earthmat layout.	Earthing conductor for Nalbari GSS shall be as per BoQ.	
5	Clause No.7.27 EARTHING SYSTEM	The distance between two buried Earth Mat (flat/rod) shall be maximum 5 meters both ways.	we request you to accept the spacing between Main mat shall be decided by bidder based on ERT values of proposed locations.	As per earthing design calculations.	
6	Clause No. 7.17 -SUPPLY VOLTAGE	auxiliary supply voltages	a) Please clarify whether auxiliary AC supply nominal voltage shall be 430V or 415V? b) Please clarify whether DC supply nominal voltage for PLCC is 50V or 48V?	As per bid.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
7	Clause No.7.21.2. Mandatory Type Test for GIS Equipment's	Sl No. 18, Tests on solid dielectric components (operating rods, spacers, etc.)	as per IEC 62271-203, Tests on solid dielectric components (operating rods, spacers, etc.) is not mandatory. Please check and update the type test requirement of GIS as per IEC 62271-203.	As per bid.	
8	Clause 7.12		We would like to inform you that, we shall provide the RAL 7032 for GIS enclosure and LCC panel, this same model is being supplied & installed across all utilities in India. Kindly accept the same.	As per GIS OEM type tested design	
9	7.12 Colour Schemes-GIS paint shades	Light Grey- 697	We would like to inform you that, we shall provide the RAL 7032 for GIS enclosure and LCC panel, We supplied this same model to all utilities in India.Kindly accept the same.	As per GIS OEM design	
10	7.15.1 Cubicle wiring	All circuits excepting CT circuits and energy metering circuit of VT 2.5 sq.mm	We would like to inform you that, all control circuit will be use by 1.5sq.mm and CT & VT circuit will be used by 2.5sq.mm.Kindly accept the same.	As per bid.	
11	7.4. HEALTH, SAFETY AND ENVIRONMENT (HSE) PLAN				Table 2: Chapter 7, Sl no. 22
CHAPTER 9: TECHNICAL SPECIFICATIONS OF XLPE INSULATED COPPER CONTROL AND POWER CABLE					
1	Cables		Both IS & IEC standard requirements are mentioned for cables. In this regard, kindly confirm the applicability of IS or IEC standard for EHV cable, HV and LT cables. Kindly note, design of cables as per IS standard and testing of cables as per IEC is not possible and vice versa. Please check and confirm the requirements.	As per bid.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
2		LT Control Cable & LT Power Cable	As we can understand, the cable size specifications (Chapter 9 TS) are only indicative. Kindly confirm whether the bidder can include different sizes of cables other than those not specified in the technical specification as per the design requirement.	The cable sizes mentioned in the technical specifications will be given the preference during detailed engineering. However, inclusion of cables of different sizes as per design requirement is acceptable, subject to approval from AEGCL during detailed engineering. No price implication will be borne by AEGCL for requirement of specific cable size to meet the design criteria.	
3	Page No. 161	The size of core shall not be less than 2.5 sq. mm for instrument transformers and 1.5 sq. mm for other control cable.	We would like to inform you that, as per our load 1.5sq.mm cable is sufficient and we supplies same to all utilities i.e. PGCIL, WBSETCL, TANTRANSCO and etc.,Kindly accept the same.	As per bid.	
4	power and control cable,Cl : 9.10,		please confirm if type test reports are available then again type tests re required to be conducted.	Type Tests Validity shall be as per latest CEA Guidelines	
5	Conductor typr		Conductor type and configuration for 400kV/ 220kV/132kV lines and approx / indicative line lengths. For short lines distance protection relays will not work hence please confirm line lengths of all incoming lines	Conductor type shall be as per BoQ.	
CHAPTER 14: TECHNICAL SPECIFICATION OF CONTROL AND RELAY PANEL					
1	14.5 Type Of Panel	These panels shall be of the following approximate dimensions: i. Height: 2250mm + 15mm anti-vibration pad + 50 mm (base) ii. Depth: 800mm to 1000 mm iii. Width: 800 mm to 1000 mm iv. Operating Height: 1800 mm.	We propose Simplex Type Panel with Height: 2200mm + 15mm anti-vibration pad + 100 mm (base). However the total height of 2315 will remain same as per spec. Pls confirm	Refer addendum	Table 2:Chapter-14 sl no. 32

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
2	14.15.2 General Specification of Numerical Relays	Relays shall have one no. front RJ45 or USB port (for RS 232 port Converter to USB shall be supplied for each substation along with spare) for Local Relay Parameterization and two nos. rear FO port/ Rear RS485 for connectivity to SAS over IEC61850 protocol	Our offered relays shall have 1 No. RS232/USB port on front for local relay parameterization & dual PRP compliant FO ports for connectivity to SAS. Rear RS485 port is not applicable for IEC61850 complaint relays.	As per bid.	
3	14.152 General Specification of Numerical Relays	The relays should have self-diagnostic features identifying area of fault or failure of a particular component or card.	Our relay has Self diagonistic feature which will give alarm through seperate life contact & LED in case of any internal Software or Hardware failure, pls confirm.	The relays should have self-diagnostic features identifying area of fault or failure of a particular component or card. The relay should be capable of generating error report which could indicate the particular area of failure.	
4	14.15.2 General Specification of Numerical Relays	Disturbance records – The relay shall have capacity to store disturbance records of at least 10 sec. duration and sampling rate per cycle shall be more than 15.	We understand that sampling rate cycle for the numerical relays is normally 15 samples per cycle is acceptable to user, pls confirm.	Not accepted. Shall be as per bid.	
5	14.15.2 General Specification of Numerical Relays	The direction of power Flow shall be displayed	We understand that this feature is applicable for relays having directional overcurrent protection functionalities, kindly confirm.	The direction of power Flow if displayed with numeric sign is acceptable and this feature is required for all relays.	
6	14.15.2 General Specification of Numerical Relays	Integrated Numerical Transformer Differential Protection as Main –I & Main-II	We understand that 2 No 2 Winding Transformer Protection Relay in Main I & Main II configuration is to be proposed with inbuilt overflux, high impedance REF & backup non directional protection functions, pls confirm if the bidder's understanding is in line with the project requirement or not.	Refer Addendum.	Table 2 Chapter 14, sl no. 33
7	Auto Reclose Function	Auto-reclose function as in-built feature of bay controller unit (BCU) provided for sub-station automation is also acceptable.	We understand that Auto Reclose function as an inbuilt function of Distance Protection Relays is also acceptable, kindly confirm	As per bid.	
8	14.16.2 Distance Protection Relay	Be suitable for single pole or three pole tripping. However, relays offered for 132 kV lines provided with mechanically ganged circuit breakers single pole tripping need not to be provided.	We understand that 132 kV Circuit Breakers envisaged in this project are of mechanical gang operated type, accordingly single phase tripping & single phase auto reclosing functionalities are required, kindly confirm.	As per bid	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
9	14.24 Bay Control Unit (BCU)	The BCU shall have redundant power supply card i.e. in case of failure of one source/Card fail, the redundant shall pick up instantly. Power supply card failure shall generate necessary alarm to local SCADA.	We propose redundant supply source with auto-changeover outside the Relay /IED/BCU. In case of a power failure in one source, Relays/BCU shall get supply from other source through a auto change-over scheme. Any supply failure shall also generate necessary alarm to local SCADA, pls confirm.	Not accepted. Shall be as per bid.	
10	14.24 Bay Control Unit (BCU)		Specification calls for separate IED for Control & Protection applications. Accordingly we understand that protection functionalities shall be applicable for only protection relays, pls confirm the understanding.	Not accepted. Shall be as per bid.	
11	14.14.1(b)	30.2 Constructional Feature 14.14.1(b) ABT Trivector Meters	Constructional feature of ABT meters are contradictory in the documents mentioned, pls clarify whether flush mounting type meter with rear terminal provision or vertical surface mounting with lower terminal provision is required.	Flush mounting type ABT meter	
12	Technical specification of SAMAST Meter Technical specification of CRP	Communication Protocol	Communication protocol of ABT Meters are contradictory in the documents mentioned, pls confirm the protocol to be considered in these meters, Modbus RS485 or IEC 61850.	As per bid	
13	14.4.2, Interoperability test for CRP	"Inter-operability Tests are conducted in manufacturer's own laboratory. In this case (i) the laboratory must have ISO 9000 (or its equivalent) series certification; and (ii) tests have been witnessed by technically qualified representatives of earlier Indian clients of Central/State Transmission Utilities"	However, we request you to accept, Inter-operability tests conducted in manufacturer's own laboratory (or) shall be conducted during FAT with offered Main I & Main II relays"	As per bid	
14	Cl. 14.15.1	Two sets of relevant software for relay configuration & setting, maintenance etc. to be supplied to each station. The numeric relay and software shall be upgradable.	We request you to accept that single set of relevant software for relay configuration & setting, Maintenance etc. which is adequate for one station.	As per bid	
15	Cl.-14.16.2.xxvi/ Distance Protection	Distance Relay shall have df/dt functions. Distance Relays have Over/Under Frequency & Over/Under Voltage Functions.	However, we shall propose DF/DT as built in of Back-up Protection Relay in Line Feeders. Please accept the same.	As per bid	
16	Cl.-14.16.6.b/ Auto Reclose Function	Auto-reclose function as in-built feature of bay controller unit (BCU) provided for sub-station	We understand that Auto Reclose as built part of either BCU or Distance Relays shall also be acceptable	As per bid	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
		automation is also acceptable.			
17	Cl-14.28 PROTECTION SCHEME FOR PANELS/132kV	The backup protection shall be provided with directional single/multi pole relays as specified in Clause 14.16.4. One triple pole over current relays for phase faults and one Earth Fault Relay for Earth Faults without highest elements shall be provided.	As the requirement is for numerical relay as per spec, so both functions as built in feature of single numerical relay shall also be acceptable. The protection configuration of relays as explained in spec is for electromechanical.relays. Pls confirm/accept.	Accepted	
18		The 33kV Feeder Panels shall be provided non directional single/multi pole relays as specified in Clause 14.16.4. One triple pole over current relays for phase faults and one Earth Fault Relay for Earth Faults with high set elements shall be provided.	As the requirement is for numerical relay as per spec, so both functions as built in feature of single numerical relay shall also be acceptable. The protection configuration of relays as explained in spec is for electromechanical relays.Pls confirm.	Accepted	
19	Cl-14.29 RELAY MAINTENANCE TOOL KIT		As there is no specific requirement mentioned / No line item for Relay maintenance tool kit , we are not envisaging the same in our scope of Supply. Please confirm.	Please refer revise BOQ	
20	Clause No. 14.17.c		We understand that one common bus bar protection relay shall be provided for both 220kV Main bus-1 & 2 with zone discrimination for each bus. Please confirm.	As per bid.	
21	14.24 Bay Control Unit (BCU)		Specification calls for separate IED for Control & Protection applications. Accordingly we understand that protection functionalities shall be applicable for only protection relays, pls confirm the understanding.	Not acceptable. Shall be as per BID.	
CHAPTER 15: SUB STATION AUTOMATION SYSTEM					

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
1	15.1 GENERAL	15.12. GATEWAY - Interface equipment	We are not envisaging any software & hardware up gradation at SLDC. Our scope is limited to Gateway at Substation which shall be suitable for SLDC integration. Please confirm whether Bidder's understanding is in order.	No Software or Hardware upgradation will be required at SLDC end. Gateway Data Configuration should be done as per SLDC's specification. The data flow from Wide Band Locations, ie. Sonabil, Samaguri and Mariani to SLDC will be under AEGCL's scope. However any requirement of Modem or Switches at Sub Station for integration with PLCC which may arise due to distance between gateway and Communication Equipment will be under Bidder's scope. Any Hardware or Software changes or upgradation at the Gateway end required for continuous data transmission as per SLDC specification will be under Bidder's scope.	
2	15.1, GENERAL	Seismic test, Vibration response test	As per IEC 60255-21, -22 & -24, class 2 in seismic test, vibration response test are pertaining to shipboard applications. Hence, we request AEGCL to accept Class 1 for the above tests. Please confirm.	As per bid.	
3	SAS integration		Any line item for SAS augmentation of bay under present extension scope is not provided in BPS (Supply Nalbari Extn). Kindly check and issue suitable amendment for the same.	Refer to revise BOQ	
4	SAS integration		Please clarify the following regarding SAS at existing substation: a)Make and model no. of existing SAS (or) RTU b)We are not envisaging any integration with SLDC/RLDC stations.	Revised BOQ will be uploaded	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
5	SAS integration		Please clarify the following regarding NMS at existing substation: a)Make and model no. of existing NMS b)We are not envisaging any integration with SLDC/RLDC stations.	Not in the scope of bay extension works in Nalbari.	
6	SAS integration		Please clarify the following regarding CDCS at existing substation: a)Make and model no. of existing CDCS b)We are not envisaging any integration with SLDC/RLDC stations.	Not in the scope of bay extension works in Nalbari.	
7	Bus bar integration		We are not envisaging any Bus bar integration at existing 132kV S/S. If the same is required, please clarify the following: a) Make and model no. of the existing bus bar protection b) Single/Redundant Bus bar Protection c) Centralized or Decentralized? d) If Decentralied whether the Peripheral Units for the 2# bays are already available? or we need to supply under this contract as part of the augmentation works?	No bus bar protection at Nalbari GSS	
8	Communication		We are not envisaging any communication integration works at existing 132kV S/S in our scope of supply. If required, Please furnish the following: 1)Make & Model of existing FOTE/PLCC. 2)Existing make of SCADA & Software version at existing Station. As far as SCADA integration is concerned, bidder's scope is limited only upto the substation gateway. We are not envisaging any modification of software / hardware at existing stations/SLDC/RLDC. Further, we presume that suitable communication links	As per bid, Data communication through PLCC/Gateway to SLDC shall be in the scope of the bidder.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
			are already available between existing 132kV SS to SLDC/RLDC Station. We are not envisaging any communication links in our scope of supply. Please Confirm.		
CHAPTER 16: GIS EQUIPMENTS					
1	16.4.3	The switchgear, which shall be of modular design, shall have complete phase isolation.	For the offered 220kV the busbar enclosure shall be three phase encapsulated and the other modules shall be single phase encapsulated; we understand that this design is acceptable as per clause 16.2 of the GIS specifications. Request a concurrence on the same	Not accepted. Bus bar enclosure shall also be single phase encapsulated. Necessary addendum will be issued.	Table 2: Chapter 16, Sl no. 2
2	16.4.5	Continuous bus lengths without gas segregation shall not be acceptable for any voltage level.	The requirements of repair, maintenance and service continuity as per IEC standard and the provided GIS specifications are complied by manufacturer	As per bid	
3	16.4.5	The devices shall provide continuous and online monitoring (Display at SAS) of the density of the gas.	Kindly confirm weather an output of 6-20mA from the Gas density monitors will be required for the monitoring requirement	Not accepted. The output shall be 4-20mA.	
4	16.4.7	As minimum flexibility in the layout arrangement, it shall be possible to remove the circuit breaker with both bus bar remaining in service	We infer the requirement calls for withdrawal of CB Interrupters durig repair and maintainance, and not the circuit breaker enclosure as it is not subject to any faults	As per bid	
5	16.4.8	The material and thickness of the enclosures shall be such as to withstand an internal flash over without burns through for a period of 300 ms at rated short time withstand current.	This value shall be in line with IEC 62271-203	As per bid.	
6	16.4.13	In case the leakage under the specified conditions is found to be greater than 0.5% after one year of commissioning, the manufacturer will have to supply free of cost, the total gas requirement for subsequent ten (10) years, based on actual leakage observed during the first year of operation after commissioning.	We infer that an additional 10% extra gas shall be required to be supplied as spare to meet out any contingency requirements	As per bid.	
7	16.4.23	Manufacturer shall submit the study report of VFTO generated for GIS installation for 220 kV and above.	VFTO generally applies to GIS rated 400kV and above, thus a VFTO analysis report shall be provided for this rating only	Not accepted. Shall be as per bid.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
8	16.4.30	In addition to above suitable portable scissor lift shall be provided for access of distant portion of GIS installation.	All portions of supplied GIS shall be accessible using walkway and portable ladder, thus provision of portable scissor lift is not envisaged	Not accepted. Shall be as per bid.	
9	16.4.43.6	Equipotential Earthmat: (below the GIS)	Excluded from GIS OEM scope of supply	The earthing of GIS equipments and the GIS building complete in all respect shall be under the scope of the contractor.	
10	16.4.44	Maximum weight of gas in a gas tight section of GIB shall not exceed 400 Kg (for 400 kV)/ 250 Kg (for 220 kV & 132 kV).	The Gas quantities shall be in line with manufacturer standard type tested design suitable form GIS operation at site	Not accepted. Shall be as per bid.	
11	16.4.46.1	The arrangement of gas sections or compartments shall be such as to facilitate future extension of any make without any drilling, cutting or welding on the existing equipment. To add equipment, it shall not be necessary to move or dislocate the existing switchgear bays.	We confirm the provision for future extension is available in the offered 400kV/220kV GIS meeting functional requirement of service continuity. We understand that any requirement of design and supply of interface module along with the associated hardware etc. as per tender shall be part of OEM performing future extension. Thus, any interface module supply is excluded from GIS OEM scope.	Design & supply of interface module for future extensions shall be under the scope of the bidder.	
12	16.5.1.4	Pre insertion resister: 400 kV circuit breakers for line bay (as per the provisions of bid proposal sheet) shall be provided with single step pre insertion closing resistors (wherever the requirement of PIR is explicitly specified so) to limit the switching surges to a value of less than 2.3 p.u for 400kV. PIR contacts should open immediately after closing of main contacts or At least 5 ms prior to opening of main contacts at rated air/gas pressure where the PIR contacts remain closed.	We understand the scheme requirement is one and half breaker type, however there is no mention of Pre insertion resistor (PIR) requirement for bays and their respective quantities. Request to kindly confirm the exact quantity of PIR bays for this requirement	PIR is not required in this project. Refer Addendum.	Table 2: Chapter 2, Sl no. 8
13	16.5.1.4	After completion of site pre-commissioning test, 03 nos. travel transducer shall be handed over to AEGCL.	Excluded from GIS OEM scope of supply	Shall be in the scope of EPC.	
14	16.5.1.18.2	Insulation co-ordination and selection of surge arrestor	Excluded from GIS OEM scope of supply	Shall be in the scope of EPC.	
15	16.5.1.22.2.1	Local Control cubicle shall be free standing, floor mounting type (Standalone). Bay mounted LCCs are not accepted.	Considering the overall compactness of the offering the 220kV GIS LCC shall be bay mounted type	Not accepted. LCCs shall be standalone type.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
16	16.11.9	Cost of the raised platform for temporary storage is deemed to be included in overall cost. The raised platform needs to be made ready before arrival of GIS equipment at site. The contractor may use the available storage areas at site with permission of site in charge.	Shall be in the Civil contractor scope, Not in GIS OEM scope	Under the scope of EPC as per approved storage plan.	
17	GAS INSULATING SYSTEM:	Any other alarm necessary to indicate deterioration of the gas insulating system.	Not applicable for offered GIS	Not accepted. Shall be as per bid.	
18	16.16 TESTING & MAINTENACE EQUIPMENT	16.16.7 Special Tools	Excluded from GIS OEM scope of supply	Shall be in the scope of EPC	
19	Chapter 10, sr.no 14, & Chapter 16, Cl. 16.4	For 230kV isolators, power frequency withstand voltage across isolating distance is indicated as 605kVrms	As per IEC 62271-1, the same shall be 530kVrms only. Please check and issue suitable amendments.	As per bid.	
20	16.4.3	The switchgear, which shall be of modular design, shall have complete phase isolation.	For the offered 220kV the busbar enclosure shall be three phase encapuslated and the other modules shall be single phase encapsulated; we understand that this design is acceptable as per clause 16.2 of the GIS specifications. Request a concurrence on the same	The bus bar for 220Kv shall be single phase encapsulated, Necessary Addendum shall be issued.	Table 2: Chapter 16, Sl no. 2
21	16.4.5	Continuous bus lengths without gas segregation shall not be acceptable for any voltage level.	The requirements of repair, maintanance and service continuity as per IEC standard and the provided GIS specifications are complied by manufacturer	Not acceptable. Shall be as per BID.	
22	16.4.5	The devices shall provide continuous and online monitoring (Display at SAS) of the density of the gas.	Kindly confirm whether an output of 6-20mA from the Gas density monitors will be required for the monitoring requirement	Not accepted. The output shall be 4-20 mA.	
23	16.4.7	As minimum flexibility in the layout arrangement, it shall be possible to remove the circuit breaker with both bus bar remaining in service	We infer the requirement calls for withdrawal of CB Interrupters during repair and maintenance, and not the circuit breaker enclosure as it is not subject to any faults	As per BID.	
24	16.4.8	The material and thickness of the enclosures shall be such as to withstand an internal flash over without burns through for a period of 300 ms at rated short time withstand current.	This value shall be in line with IEC 62271-203	As per BID.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
25	16.4.13	In case the leakage under the specified conditions is found to be greater than 0.5% after one year of commissioning, the manufacturer will have to supply free of cost, the total gas requirement for subsequent ten (10) years, based on actual leakage observed during the first year of operation after commissioning.	We infer that an additional 10% extra gas shall be required to be supplied as spare to meet out any contingency requirements	Not acceptable. Shall be as per BID.	
26	16.4.23	Manufacturer shall submit the study report of VFTO generated for GIS installation for 220 kV and above.	VFTO generally applies to GIS rated 400kV and above, thus a VFTO analysis report shall be provided for this rating only	Not acceptable. Shall be as per BID.	
27	16.4.30	In addition to above suitable portable scissor lift shall be provided for access of distant portion of GIS installation.	All portions of supplied GIS shall be accessible using walkway and portable ladder, thus provision of portable scissor lift is not envisaged	Not acceptable. Shall be as per BID.	
28	GAS INSULATING SYSTEM:	ii) Any other alarm necessary to indicate deterioration of the gas insulating system.	Not applicable for offered GIS	Not acceptable. Shall be as per BID.	
29	16.4.44	Maximum weight of gas in a gas tight section of GIB shall not exceed 400 Kg (for 400 kV)/ 250 Kg (for 220 kV & 132 kV).	The Gas quantities shall be in line with manufacturer standard type tested design suitable form GIS operation at site	Shall be as per BID.	
30	clause 16.5.1.4	Pre insertion resister: 400 kV circuit breakers for line bay (as per the provisions of bid proposal sheet) shall be provided with single step pre insertion closing resistors (wherever the requirement of PIR is explicitly specified so) to limit the switching surges to a value of less than 2.3 p.u for 400kV. PIR contacts should open immediately after closing of main contacts or At least 5 ms prior to opening of main contacts at rated air/gas pressure where the PIR contacts remain closed.	We understand the scheme requirement is one and half breaker type, however there is no mention of Pre insertion resistor (PIR) requirement for bays and their respective quantities. Request to kindly confirm the exact quantity of PIR bays for this requirement	As per Addendum issued	Table 2: Chapter 2, Sl no. 8
31	clause 16.5.1.22.2.1 4	Local Control cubicle shall be free standing, floor mounting type (Standalone). Bay mounted LCCs are not accepted.	Considering the overall compactness of the offering the 220kV GIS LCC shall be bay mounted type	Not Accepted. LCC shall be standalone.	
32	clause 16.5.1.18.2	Insulation co-ordination and selection of surge arrestor	We understand that the location and provision of surge arrestors should be as per respective 400kV,220kV and 132kV single line diagram provided as tender drawings. Kindly confirm if the bidder's understanding is in order.	Insulation Coordination study shall be carried out and accordingly the Locations and Numbers of Surge arresters shall be decided.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
33		GIB Length	We request you to kindly quantify GIB length, the final amendment will be as per the actual.	**Refer the updated BoQ**	
34	16.4.5	Continuous bus lengths without gas segregation shall not be acceptable for any voltage level.	The requirements of repair, maintatinance and service continuity as per IEC standard and the provided GIS specifications are complied by manufacturer	As per BID	
35	16.4.5	The devices shall provide continuous and online monitoring (Display at SAS) of the density of the gas.	Kindly confirm whether an output of 6-20mA from the Gas density monitors will be required for the monitoring requirement	Not accepted. The output shall be 4-20 mA.	
36	16.4.7	As minimum flexibility in the layout arrangement, it shall be possible to remove the circuit breaker with both bus bar remaining in service	We infer the requirement calls for withdrawal of CB Interrupters durig repair and maintainance, and not the circuit breaker enclosure as it is not subject to any faults	As per BID	
37	16.4.8	The material and thickness of the enclosures shall be such as to withstand an internal flash over without burns through for a period of 300 ms at rated short time withstand current.	This value shall be in line with IEC 62271-203	As per BID	
38	16.4.23	Manufacturer shall submit the study report of VFTO generated for GIS installation for 220 kV and above.	VFTO generally applies to GIS rated 400kV and above, thus a VFTO analysis report shall be provided for this rating only	As per BID	
39	16.4.30	In addition to above suitable portable scissor lift shall be provided for access of distant portion of GIS installation.	All portions of supplied GIS shall be accessible using walkway and portable ladder, thus provision of portable scissor lift is not envisaged	As per BID	
40	16.4.44	Maximum weight of gas in a gas tight section of GIB shall not exceed 400 Kg (for 400 kV)/ 250 Kg (for 220 kV & 132 kV).	The Gas quantities shall be in line with manufacturer standard type tested design suitable form GIS operation at site	As per BID	
41	16.4.46.1	The arrangement of gas sections or compartments shall be such as to facilitate future extension of any make without any drilling, cutting or welding on the existing equipment. To add equipment, it shall not be necessary to move or dislocate the existing switchgear bays.	We confirm the provision for future extension is available in the offered 400kV/220kV GIS meeting functional requirement of service continuity. We understand that any requirement of design and supply of interface module along with the associated hardware etc. as per tender shall be part of OEM performing future extension. Thus, any interface module supply is excluded from GIS OEM scope.	Design and Supply of Interface Module for Future Extensions shall be under the scope of the Bidder.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
45	16.5.1.22.2.1	Local Control cubicle shall be free standing, floor mounting type (Standalone). Bay mounted LCCs are not accepted.	Considering the overall compactness of the offering the 220kV GIS LCC shall be bay mounted type	Not Accepted. LCC shall be standalone.	
CHAPTER 17: TECHNICAL SPECIFICATION OF TRANSFORMER (UPTO 400kV CLASS)					
1	Annexure A 1.0	Technical specification of transformer	As per referred annexure, we understand that neutral is internally formed in ICT as vector group of 500MVA transformer is YNa0d11, however, as per Electrical Layout Plan drawing, outdoor neutral bus formation is shown on HV side. We understand such external neutral formation are required in case of 1-phase transformers only & the same is not required for this project. Please confirm.	Confirmed	
2	Cl. 17.4.0 (ii), Dynamic Effect of Short Circuit: For 220 kV Class Transformer	Bidder / Manufacturer should have successfully carried out Dynamic Short Circuit Test on any rating of 220 kV or above voltage class transformer as on the originally scheduled date of bid opening and shall enclose the relevant Test Report / Certificate along with bid. In case bidder has not successfully tested 220 kV or above voltage class transformer for Dynamic Short Circuit Test, their bid shall be considered technically non-responsive. The offered transformer should comply the requirement of similarity clause specified in IS 2026 (PART 5) / IEC 60076-5 with respect to short circuit tested transformer. Further, design review of offered transformer shall be carried out based on the design of short circuit tested transformer.	We request client to accept dynamic effects of short circuit by detailed calculations by check against the manufacturer's design rules for short circuit strength as per IEC 60076 part-5 in case of non availability of short circuit test report.	Not acceptable. For, 220kV & 132kV, dynamic short circuit test reports as per latest CEA guidelines and losses shall be available with the transformer manufacturer on the date of bid submission For 500/315 MVA Transformer, dynamic short circuit report shall be submitted as per bid.	Chapter 17, Sl No. 5
3	Clause No. 17.4.0. SPECIFIC REQUIREMENT	Necessary test documents of previously tested similar or higher rated (both in MVA and voltage class) transformer shall have to be submitted with the bid.Test reports for higher class of equipment are acceptable with commitment to perform the type tests free of any charge on the particular equipment(s) after the award of contract.	We request AEGCL to confirm the following: a) Similar rating here refers to voltage & MVA rating same as that of the offered transformer. b) Type tests as listed in Annexure-I (Test plan) shall be performed on one unit of the entire package, if Bidder offers test reports of higher rated Transformer.	**Type test report of previously tested Transformer of similar rating as per the bid shall only be accepted and to be submitted along with the bid. Refer Table-2 (Addendum)**	Table2: Chapter 17: sl no. 3,4,5 &6

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
		Type Test Reports older than five (5) years on the date of Technical bid opening shall not be accepted.			
CHAPTER 24: TECHNICAL SPECIFICATION FOR DG SET					
1	Cl : 24.4.10.2,	Redundant battery system with 24V DC is asked. Please note that at 250kVA rating or size only 12V DC battery system can be provided.	NO DG supplier is providing 24V DC system with redundant Please consider and confirm.	Shall be taken up during detailed engineering	
CHAPTER – 26: SPECIFICATION FOR DESIGN AND FABRICATION OF SUBSTATION STEEL STRUCTURES					
1	Clause 26.4.0 Design Parameters	All structures shall be designed for the worst combination of dead loads, live loads, wind loads as per code IS:875, seismic forces as per code IS:1893, loads due to deviation of conductor, load due to unbalanced tension in conductor, torsional load due to unbalanced vertical and horizontal forces, erection loads, short circuit forces including "snatch" in the case of bundled conductors etc. Short circuit forces shall be calculated considering a fault level of 40 kA, 50kA, 63kA or as applicable. IEC-60865 may be followed for evaluation of short circuit forces.	Equipment support Structure in lattice is also accepted. since many Utilities in India are widely using the same. Kindly confirm.	Refer Addendum Lattice type structures are also accepted. However, AEGCL shall have the right to choose any type structure (lattice/pipe) as per requirement during detailed engineering without any price implication.	Chapter 26, sl no.1
CHAPTER 34: SPECIFICATION FOR DESIGN AND FABRICATION OF TRANSMISSION LINE TOWERS					
1	34.1.8.3 Transverse Loads: security condition	i. Transverse loads due to wind acting on tower structure, conductors, ground wires and insulators shall be taken as nil.	As per IS 802-Part1/Sec 2-2015, for suspension towers , under security conditions 75% of the full wind is to considered. Hence, Please confirm whether the loading calculations for 132kV 220kV and 400kV shall be as per IS 802-Part1/Sec 2-2015.	As per IS 802-2015	
2	34.1.5.0 SLENDERNESS RATIO	(b) Bracings: 200	As per IS 802-Part2/Sec 2-2016, the limiting kl/r of lattice members other than redundant members shall be 150. Hence, Please confirm whether the limiting kl/r for 132kV 220kV and 400kV shall be as per IS 802-Part2/Sec 2-2016.	As per IS 802-2015	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
3	34.1.5.0 SLENDERNESS RATIO	Redundant member designs	As per IS 802-Part2/Sec 2-2016, the limiting kl/r redundant and members carrying nominal forces considering the end connections shall be 250.Please confirm.	As per IS 802-2015	
4	34.1.2.2.2 Body Extensions Truncations & Unequal Leg Extensions Truncations	a) All Normal towers mentioned in Clause above shall be designed for 3, 6, 9, 12, 15- and 18-meter body extensions for maintaining adequate ground clearance as per the terrain, without reducing the safety margins available in normal towers in any manner. Towers which require more than 18 m extension shall be treated as Special Towers. b) All above extensions to normal towers shall be treated as part of normal towers only. c) Prices shall be quoted as per weight (in MT) basis on the guaranteed black weight of towers. d) Designs and drawings of all type of towers with extensions as mentioned in (a) above along with foundations (all type) shall be submitted for approval of the employer irrespective of whether such requirements are there or not for a particular transmission line.	We understand that Normal tower with +9m body extension shall be the testing combination. Accordingly, +3m body extension and +6m body extension shall be designed without reduction in design parameters and safety margins. For +12m,+15m,+18m body extensions, design shall be done without reduction of saftey margins wth respect to the tested tower by considering appropriate reduction in design parameters. Please confirm our understanding is correct.	Tests shall be carried out for +18m extension for B,C,D type towers and for A type tests shall be carried out for +9m extension for all voltage levels. The bidders shall quote in the respective design services line item which shall include destructive test. Special type towers shall be very carefully designed, without reduction of safety margins, on the basis of the results of +18m type tested extensions towers.	
5	34.1.19.2	Test at Contractor's Premise:	Please confirm the testing combination for 132kV,220kV and 400kV Towers	Tests shall be carried out for +18m extension for B,C,D type towers and for A type tests shall be carried out for +9m extension for all voltage levels. The bidders shall quote in the respective design services line item which shall include destructive test. Special type towers shall be very carefully designed, without reduction of safety margins, on the basis of the results of +18m type	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
				tested extensions towers.	
6			Please confirm the tower testing is required for 132kV and 220kV Multicircuit towers.	Yes	
7		Basic Design Parameters	We understand that Double circuit tower has to be designed considering single circuit strung condition also.	Double Circuit Tower shall be designed considering Single Circuit Strung Condition on one single side.	
CHAPTER 40: TECHNICAL SPECIFICATION FOR INSULATOR STRING HARDWARE					
1	Insulator		Kindly confirm whether polymer-type long rod insulators can be accepted as tension/suspension insulators for Transmission lines.	Not accepted. For transmission lines, porcelain long rod insulators shall be used.	
2	Insulator		Kindly confirm whether polymer-type Disc insulators can be accepted as tension/suspension insulators in Switchyard.	Not accepted. Disc insulators shall be porcelain type.	
VOLUME 3:					
1	Building Size	Building Size is fixed as per technical specification.	Please confirm that, can the bidder optimize building size or not.	The given building dimensions are fixed. However, the successful bidder shall clearly demonstrate that the building size (length, width & height)is sufficient to accommodate all the present as well as future bay requirements keeping all electrical clearances as per standard design, during the detailed engineering. Any increase in the dimensions of the building shall be in the scope of the successful bidder and will be paid in pro-rata basis.	
2	SLD (Drawing no NAC/AEGCL/RANGIA/SLD-003)		As per referred SLD, four no's of safety grounding switches are indicated for 400kV Line bays and 5 nos safety grounding switches for 400/220kV transformer bays. However, in GIS bay description as per clause 2.6.12.1 of Volume-II, only two and three numbers of safety grounding switches are mentioned for Line &	The number of safety grounding switches and HSES shall be as per OEM type tested design.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
			transformer bays respectively.Hence please update the SLD as well as GIS description of 400kV GIS as per clause 2.6.12.1 of Volume-II.		
3	400kV GIS building layout & 220kV GIS building layout	400kV GIS building layout - Dwg. No. NAC/AEGCL/RANGIA/400GIS/GA-008,R2 & 220kV GIS building layout - Dwg. No. NAC/AEGCL/RANGIA/GA-009,R2	As per referred drawings, kindly confirm the following points. 1. We understand that given building dimensions are not minimum requirement, same can be further optimized keeping all electrical clearance requirement as per specification. 2. We understand that both 400kV and 220kV GIS building shall be constructed for present scope of bays only.	1) The given building dimensions are fixed. However, the successful bidder shall clealry demonstrate that the building size (length, width & height)is sufficient to accommodate all the present as well as future bay requirements keeping all electrical clearances as per standard design, during the detailed engineering. Any increase in the dimensions of the building shall be in the scope of the successful bidder and will be paid in prorata basis. 2)Both 400kV & 220kV GIS buildings shall be constructed considering present as well as future scope.	
4	Electrical Layout Plan	Dwg No. NAC/AEGCL/RANGIA/EL-004,R4	As per referred Electrical layout plan, Kindly confirm following points 1. We understand that the all 400kV,220kV,132kV and 33kV line orientations are fixed and same shall be as per referred layout only. 2.We understand that the provided equipment arrangement is tentative and same can be optimized keeping all electrical clearance as per specification. 3. Shown LM locations and number are tentative only. Same shall be as per lightning calculations.	1. The dead end tower locations of 400kV, 220kV & 132kV lines are fixed and the bay orientations will remain unchanged. 2. Except the 400kV, 220kV & 132kV line bay orientations, the other equipment arrangement may be optimized keeping all electrical clearances as per specification. 3. Accepted. The LM locations and quantities are tentative and the same shall be as per DSLP calculations.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
5	400kV GIS building layout - & 220kV GIS building layout -	Dwg. No. NAC/AEGCL/RANGIA/400GIS/GA-008,R2 & Dwg. No. NAC/AEGCL/RANGIA/GA-009,R2	As per referred building layout, EOT crane of 6 Ton capacity for 400kV GIS building and 5 Ton capacity for 220kV GIS building is shown. However, as per BPS, Supply for Rangia, line item no.13.08 and 14.08, Crane capacity of 12.5 Ton and 10 Ton is mentioned for 400kV and 220kV GIS building respectively. As above requirements are contradicting, Please check and confirm the minimum capacity of EOT crane & hook height for 400kV & 220kV GIS.	As per updated BoQ	
6	Drawings		Kindly provide the following drawings/Inputs for the proposed Substation. 1. AC & DC SLD. 2. Typical cable trench sections 3. Type of cables and cable sizes to be followed along with specification.	1. Shall be decided during detailed engineering 2. Drawings for A, B, C AND D type provided. For 220 kV cables trench shall be designed by Contractor. 3. As per bid and BoQ.	
7	Nalbari electrical layout - Tender drawing		As per clause 2.6.11.c), construction of 2 numbers of line bays are under present scope of work. However, as per referred tender drawing, only one number of bay is shown under cloud mark as present scope of work.Please clarify whether the bay shown under cloud is in present scope (or) the 2# bays shown in "blue" colour are under present scope?	2 number of bays marked in blue colour. Please refer updated drawings.	
8	SLD (Drawing no NAC/AEGCL/RANGIA/SLD-003)		We would like to inform you that, CSD is required for all Reactor bays and associate Tie bays. PIR is required for above 200kms - we understood from you that the Line length here is within 120KMs hence kindly delete the PIR from Line bays. In any of the cases- The combination of PIR+CSD normally not used, for reliability you may use the CSD relay as main-1 & main -2 for Transformers/Reactors and associated Tie bays, which is a standard practice across the utilities.	As per Addendum issued	
9	SLD-400kV	Earth Switch on all feeder in Main Buses side.	We would like to inform you that, Earth switch on main	The number of safety grounding switches	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
			bus side is not required, because bus earth switch is already provided and that earth switch will connect the whole main bus earth.Please consider the same and please go through our proposed SLD.Kindly accept our proposal.	and HSES shall be as per OEM type tested design.	
10	SLD-220kV	CT core quantities	We would like to inform you that, in SLD it's mentioned that in Bus coupler bay 6 no's of cores, but in technical specification file it's mentioned that 5 No's of cores is required for Bus coupler bay. We considered SLD and please confirm the same.	SLD modified	
11	SLD-400/220kV	Short circuit current	We would like to inform you that, short circuit period is mentioned is 3 seconds for both GIS ratings, but in technical specification it's mentioned that 1 Second.Kindly clarify the same.	TSC shall be for 3 sec for all the equipments.	
12	SLD	Short time current capacity	In Tender SLDs short time current capacity is indicated with 3 sec duration but in BOQ it is shown with 1 sec. Please confirm.	STC shall be for 3 seconds for all equipments	
13	Civil works & 002- MASTER PLAN_RANGIA	Water tank & pump house	As per the master layout there is water tank & pump house shown near to the residential buildings. However, there is no separate item in price schedule for water tank & pump house.Kindly suggest in which item this shall be claimed or pls include a new item for the same.	Please refer to BOQ	
14	Civil works & 002- MASTER PLAN_RANGIA	Children's park	As per the master layout, there is Children's park shown in the layout. However, there is no separate item in price schedule for children's park. Kindly suggest in which item this shall be claimed or pls include a new item for the same.	Included in landscaping and shall be done during detail engineering	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
15	NAC/AEGCL/RANGIA/ 400GIS/GA-008 NAC/AEGCL/RANGIA/ 400GIS/GA-009 NAC/AEGCL/RANGIA/TC/ ARCH-104 NAC/AEGCL/RANGIA/RE/ ARCH-105 NAC/AEGCL/RANGIA/SB/ ARCH-108 NAC/AEGCL/RANGIA/GR/ ARCH-109 NAC/AEGCL/RANGIA/OSS/ ARCH-110 NAC/AEGCL/RANGIA/ STORE/ARCH-111		We understand that all the buildings (400kV GIS building, 220kV GIS building, Transit camp building, RE'S residence building, Security barrack, Security/Guard room, Open Store, Store room building) need to be quoted as per the drawings attached to the tender documents. If there is any increase in the building size during execution, the bidder will be paid extra based on the final quantity approved by AEGCL. Please confirm.	The building dimensions are fixed. In case the size of building is increased or decrease of building size the price will be given on prorata basis.	
NALBARI BAY EXTENSION					
1	General	Civil works	Please provide the following drawings/details for the Existing substation at NALBARI. 1. Existing control room building layout 2. Existing Road/Drain layout 3. Existing Cable trench layout 4. Existing gravel spreading layout 5. Soil investigation report (if available) 6. Contour survey (if available) 7. HFL data (if available) 8. Global coordinates in order to estimate the quantum of work.	Will be provided during detail engineering	
2	General		Please confirm if any building modification-dimantling-civil extension work is required or not at existing Nalbari SS	Dismantling and reconstruction of boundary wall along with retaining wall is covered in scope but Control Room building is not required.	
PRICE SCHEDULE: BOQ					

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
1	Supply_Rangia _Item no. 13.01,	3- Ø 400 kV, 4000 A, 63 kA-1 sec, metal enclosed SF6 Gas Insulated Switchgear - Line bay Module as per technical specification	We understand the scheme requirement is one and half breaker type, however there is no mention of Pre insertion resistor (PIR) requirement for bays and their respective quantities. Request to kindly confirm the exact quantity of PIR bays for this requirement	PIR is not required in this project. **Refer Table 2: Addendum.**	Table 2: Chapter 16, sl no.8
2	Supply_Rangia_ Item no13.07 & 14.04	400kV, 63kA for 1 sec and 245kV, 50kA for 1 sec SF6 Gas Insulated Bus Duct (GIB) single phase from respective GIS bay module up to SF6 to Air bushings including required support structures, jointing elements and other accessories for Transformer bays, line bays and bus reactor bays as per site requirement. (for both indoor and outdoor of GIS)	We request to provide the AutoCAD copy indicating the clear location of Line Gantries and Power transfer to estimate the exact busduct length. Considering the criticality of the overall requirement it is also recommended to provide the length of the duct that will be considered as a part of estimation,	AutoCAD copies cannot be shared. However, the quantity of bus duct required for the project will be mentioned in the revised BoQ.	
3	Illumination	Indoor Illumination is not mentioned in the BPS.	Please add the line item for indoor illumination in the BPS or advice any other.	Indoor illumination is Inclusive with RCC buildings item.	
4	Drain		We understand that Diversion of Drains/Stream other ancillary works, which are not mentioned in BPS need not be considered. Please confirm	Refer to the revised BOQ.	
5	Isolators and accessories as per specification		As per referred item, Quantity of 145kV & 33kV isolator is not matching with number of bays in the present scope as mentioned in the clause 2.6.11 under Volume-II. Please check and update the quantity of 145kV & 33kV isolator for the same.	Quantity of 132kV & 33kV isolators shall be as per BoQ.	
6			As per referred line item, Horizontal center break type isolator is mentioned for 400kV,220kV and 132kV voltage level, however , as per Electrical Layout Plan - Dwg No. NAC/AEGCL/RANGIA/EL-004, double break isolator is mentioned for all voltage levels.As above requirements are contradicting, We request AEGCL to amend the Price Schedule with Double break isolators. Otherwise, it will increase the Gantry width & impact the substation layout.	BoQ updated	
7	Price schedule, Supply for Rangia S/s, Sl No. 15 -		We understand that all the items mentioned under referred line item shall be supplied commonly for	BoQ updated.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
	Supply of Testing and Maintenance equipment for GIS as specified (each for 220kV & 400kV GIS)		Rangia S/s and not for individual voltage levels.For example, line item number 15.02, online partial discharge monitoring unit - 2 Nos. are given, among which one number of partial discharge unit for 400kV and one number for 220kV GIS shall be supplied.Kindly confirm whether bidder's understanding is in order.		
8	Price schedule, Supply for Rangia S/s, Sl No. 6 - Surge arrestor as per specification		As per referred item, Quantity of 220kV and 132kV surge arrester is not matching with number of bays in the present scope as mentioned in the clause 2.6.11 under Volume-II. Please check and update the quantity of 220kV and 132kV surge arrester and issue suitable amendment.	As per BoQ	
9	Price schedule, Supply for Rangia S/s, Sl No. 8 - Outdoor AIS Circuit breaker		As per referred item, Quantity of 132kV circuit breaker is not matching with number of bays in the present scope as mentioned in the clause 2.6.11 under Volume-II. Please check and update the quantity of 132kV circuit breaker and issue suitable amendment.	As per BoQ	
10	Price schedule, Supply for Rangia S/s, Sl No. 10 - Instrument transformer		As per referred item, Quantity of 132kV potential transformer is not matching with number of bays in the present scope as mentioned in the clause 2.6.11 under Volume-II. Please check and update the quantity of 132kV potential transformer and issue suitable amendment.	As per BoQ	
11	BoQ - Supply Rangia - Sl No. 5.2, 440V MCCB with power receiving panel for Station service transformer		As per referred line item, 440V MCCB for Station service transformer is mentioned. In this regard, please furnish the following details: a) Location (Outdoor/Indoor) b) Application c) Technical Specification	**Location shall be outdoor. BoQ updated..**	
12	BoQ - Supply Rangia- Sl No. 11.013 Control relay & protection panel (Simplex type) -		As per referred item, Quantity of Control relay & protection panel of 400/220kV ICT is not matching with number of ICT bays in the present scope as mentioned in the clause 2.6.11 under Volume-II. Please check and	**BoQ updated**	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
	400/220kV ICT		update the quantity of Control relay & protection panel for the same.		
13	BoQ - Supply Rangia - Sl No.13 & 14 - 400kV & 220kV GIS equipment		We understand that LT power & control cable between GIS to LCC shall be included in the GIS line item. It shall not be paid under BoQ line item Sl No. 24 & 25. Please confirm whether bidder understanding is in order.	Confirmed.	
14	BoQ - Supply Rangia - Sl No. 20.02 & 20.4 - Battery charger		As per referred clause, Quantity of 220V & 48V, Dual float cum boost charger is 2 sets. We understand that the term 'Dual' refers to Float & Boost operation in the same charger and hence the total quantity of Float-cum-boost charger shall be 2Nos. Please confirm.	The total quantity of 48V float cum boost chargers shall be four numbers (2 numbers of FCBC will be considered as 1 set)	
15	BoQ - Supply Rangia - Sl No. 21 - Power line carrier communication equipment		As per clause no. 2.6.11, LILO of 400kV Balipara - Bongaigaon D/C line at Rangia station. In this regard, Please clarify whether PLCC is existing at remote end (Balipara & Bongaigaon). If yes, Please furnish the make & model no. of remote end PLCC. Also, please confirm the scope of shifting of PLCC equipment's from any of either stations to Rangia station to provide hassle free communication system . Please include suitable line items in the BPS.	PLCC panels for remote end, i.e Balipara and Bongaigaon ends have been considered under this project.	
16	BoQ - Supply Rangia - Sl No. 21 - Power line carrier communication equipment		As per clause no. 2.6.11, LILO of 220kV Rangia (extn.)-Amingaon at Rangia(new) station. In this regard, Please clarify whether PLCC is existing at remote end (Rangia(extn.)-Amingaon). If yes, Please furnish the make & model no. of remote endPLCC. Also, please confirm the scope of shifting of PLCC equipment's from any of either stations to Rangia station to provide hassle free communication system. Please include suitable line items in the BPS.	PLCC panels for remote end i.e, Rangia (existing) & Amingaon, have been considered under this project.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
17	BoQ - Supply Rangia - Sl No. 21.02 - Power line carrier communication equipment for 400kV		In the referred line item 16Nos. of Digital power line carrier panel is mentioned for 400kV. In this regard we understand that the same is carrier equipment for speech + Protection (2nos. for each line). Further, we understand that supply of PLCC equipment for remote end is also to be covered in the same.As status of bay equipment to LDC & RCC is required, please add a separate line item for carrier equipment for speech + Data.	As per clause 19.7 of Vol-2, the nearest wideband location is 220kV Rangia (existing), 220kV Amingaon, 400kV Balipara, 400kV Bongaigaon & 132kV Nalbari.	
18	BoQ - Supply Rangia - Sl No. 21.03 - Power line carrier communication equipment for 220kV		In the referred line item 8Nos. of Digital power line carrier panel is mentioned for 220kV.However, we understand that the same is carrier equipment for speech + Protection (2nos. for each line). Further, we understand that supply of PLCC equipment for remote end is also to be covered in the same . Hence, quantity for the same shall be 24 Nos. Please check and issue suitable amendment for the same.As status of bay equipment to LDC & RCC is required, please add a separate line item for carrier equipment for speech + Data.	As per clause 19.7 of Vol-2, the nearest wideband location is 220kV Rangia (existing), 220kV Amingaon, 400kV Balipara, 400kV Bongaigaon & 132kV Nalbari.	
19	BoQ - Supply Rangia - Sl No. 21.04 - Power line carrier communication equipment for 132kV		In the referred line item 2Nos. of Digital power line carrier panel is mentioned for 132kV.However, we understand that the same is carrier equipment for speech + Protection (2nos. for each line). Further, we understand that supply of PLCC equipment for remote end is also to be covered in the same . Hence, quantity for the same shall be 8 Nos. Please check and issue suitable amendment for the same. As status of bay equipment to LDC & RCC is required, please add a separate line item for carrier equipment for speech + Data.	As per clause 19.7 of Vol-2, the nearest wideband location is 220kV Rangia (existing), 220kV Amingaon, 400kV Balipara, 400kV Bongaigaon & 132kV Nalbari.	
20	BoQ - Supply Rangia - Sl No. 21 - Power line carrier		We understand that the sufficient number of spare feeders are available in 48V DC distribution board in	48V Power supply will be available at remote ends.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
	communication equipment		remote end to provide the 48V DC power supply to PLCC panels at remote end stations which are supplied under present scope. Further, Augmentation of PLCC panel and supply of power cables at remote end shall not be in bidder's scope.	Supply/shifting/dismantling/ETC of Panels at remote end shall be in the scope of bidder.	
21	BoQ - Supply Rangia - Sl No. 23 & 24 - Power cable		We understand that 220KV cable shall be laid directly buried. Please confirm.	220kV cable shall be laid in trench.	
22	BoQ - Supply Rangia - Sl No.30 - HVWS/NIFPS for Transformer		As per referred line item, HVWS/NIFPS is mentioned for 2 nos. of 160MVA transformers. However, only 1 No. of transformers are in scope of works as per clause 2.6.11 under volume-II. Hence, kindly check and revise the BPS.	As per BoQ (2 x 160 MVA)	
23	BoQ - Supply Rangia - Sl No.32- Lighting		In the referred line item, requirement for indoor lighting for example 400kV and 220kV GIS Hall with relay room, control building, kiosk building, residence building, security room, transit camp building etc shall be included. Please check and include as a separate line item.	Indoor illumination is Inclusive with RCC buildings item in electrical services.	
24	BoQ - Supply Rangia - Sl No.33 - Public addressing system and CCTV		As per referred BoQ item, Public address system & CCTV shall be provided for the substation. However, specification for same is not available. Please check and furnish the detailed specification with the following minimum requirement: a) Type of camera (Fixed or PTZ camera) b) Location of camera (indoor or outdoor)	Ref Addendum SPEC TO BE INCLUDED FOR PUBLIC ADDRESING SYSTEM & CCTV. a) Type of camera: as per spec b) Location of camera: both indoor & outdoor	Chapter- Price Schedule (BOQ) Sl no. 1
25	BoQ - Supply Rangia - Sl No.36 - Mandatory spares		As per referred line item, Mandatory spare as per Chapter 27 of technical specification is mentioned, however, mandatory spare requirement is given in Chapter 32. Kindly check and confirm.	**BoQ updated.**	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
26	BoQ - Supply Rangia - Sl No.24 - Power cable		We understand that LT power cable between MLDB to indoor & outdoor lighting panel shall be paid under referred line item. However, LT cable between lighting panel to fixture shall be considered under BoQ line item, Sl No. 32- Lighting. Please confirm whether bidder understanding is in order.	Cables from lighting panel to fixture (both indoor & outdoor) shall be considered in the respective illumination items.	
27	BoQ - Supply Rangia - Sl No.32- Lighting		We understand that outdoor lighting is required only for present scope of area and outdoor light fixture can be mounted on Lightning mast (LM), Towers, Gantries & buildings. Please confirm.	Outdoor illumination for the entire area (present & future) shall be under scope of the bidder.	
28	BoQ - Supply Rangia - Sl No.34- Lightning protection		We understand that lightning protection shall be provided only for present scope of work. Lightning protection can be covered with Lightning mast (LM), Towers & shield wires as required for present scope. However, as per 400/220/132/33kV GIS plot plan, Lightning mast (LM) is shown for future line bays also. In this regard, we shall consider LM only present scope of work. Please confirm.	LM shall be considered both for present as well as future scope.	
29	BoQ - Supply Rangia - Sl No.36 - Mandatory spares		We understand that Mandatory spares shall be provided as per BoQ only. If any mandatory spares are mentioned in the technical specification apart from BoQ are not in bidders scope. Please confirm.	Any mandatory spares mentioned in technical specs, apart from the updated BoQ, shall be under the scope of the bidder	
30	BOQ-Earthing & earth mat		We presume that existing earth mat is available at existing station. And our scope is only to extend existing earth mat in area under present scope with the same spacing.We request you to confirm the spacing between main mat of existing substation & the details of Main mat material for our understanding. We also understand that there is no requirement of any soil treatment at the existing station. Please confirm.	As per BoQ.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
31	BOQ-Cable trench		We presume that existing cable trench is sufficient to cater present scope of cable. Our scope is limited to construction of only branch cable trench for present scope of bay which in turn gets connected to the existing Main cable trench available near the present scope of bays. Please confirm.	New cable trench construction for the new bays shall be in the scope of the bidder.	
32	BoQ - Supply Rangia - Sl No. 17,18 & 18 – Power transformer & reactor		We understand that substation accessories like BDV testing kit, oil storage tank, oil sampling bottle shall be submitted only one set. Same shall not be considered for each of the referred line item. Kindly confirm if bidder's understanding is in order.	As per BOQ	
33	BOQ: Supply Rangia: Item no-27		As per the price schedule, supply of towers and girders is provided in numbers according to the type such as 4T1,4T2,4B1, 2T1, etc.As the details of the type of towers and girders are not available in the tender document, request to pls provide the reference drawings for the same in order to calculate the structure weight.	To be designed during detail engineering by EPC contractor	
34	BOQ		As per design schedule, Multicircuit design is required for 220kV and 132kV towers. However, quantity of multicircuit is not provided in the supply schedule. Hence we understand that, design of 220kV and 132kV multicircuits is required during execution stage in case of any line requirement. Design and GTP of the multicircuit towers shall not be included along the bid. Please confirm.	Yes, design and GTP of the multicircuit towers shall not be included along the bid. However these shall be submitted during detailed engineering for approval as per requirement.	
35	BOQ		As per design schedule, 400kV DA design is required However, quantity is not provided in the supply schedule. Hence we understand that, design of 400kV DA tower and its extensions is required during execution stage in case of any line requirement. Design and GTP shall not be included along the bid. Please confirm.	Yes.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
36	BOQ		As per design schedule, +25m BE and +36m BE is required. However, quantity is not provided in the supply schedule. Hence we understand that, design of +25m and +36m extensions is required during execution stage in case of any line requirement. Design and GTP shall not be included along the bid. Please confirm.	Yes.	
37	BOQ		As per design schedule, separate foundations are envisaged for all extensions from +3m to +36m. For easy construction, we propose to combine foundations as per line requirement into sets. Please confirm whether its acceptable.	As per BOQ	
38		Some of items in BOQ is in LOT & Detailed layout/Drawing also provided.	We estimate quantities based on your tender layout only. If there is any change in layout during detailed engineering, the quantity variation for changing layout will be paid extra based on the final quantity approved by AEGCL. Please confirm	Please refere Section-6 of Volume-1	
39	BOQ (Sl 15.021)	Online Partial Discharge Monitoring Unit	In India, Major utilities are also accepting offline partial monitoring systems instead of online partial monitoring systems. Please accept the request.	Not accepted. Shall be as per bid.	
40	Price schedule, Supply for Rangia S/s, Sl No. 29 - Fire Alarm & Detection including all accessories as per specification		Please provide the detailed specification for Fire Alarm system.	As per IS 9972 (latest revision)	Chapter -2 Sl no.18
41	Price schedule, Supply for Supply Nalbari Ext.		Please include Air Conditioning and Ventilation system in Price schedule line item.	Refer the updated BoQ.	
42	Price schedule, Supply for Supply Nalbari Ext.		Please include FDA & extinguishers System in Price schedule line item.	Refer the updated BoQ.	
43	Item rate BOQ - ETC Rangia 25.04 to 25.13	Reference Electrical Layout plan (NAC/AEGCL/RANGIA/EL-004)	The quantity of the following items in the Price schedule and Electrical Layout plan drawing is mismatched. (Towers type 2T1, 2T2, T1, T2, T3, DT1, and beams type 2B1, BB1, BB2, DB1).Kindly clarify the same.	As per updated BoQ	
44	Civil Works 4.0		We understand that the construction of foundations involves both backfilling with excavated soil and also backfilling with borrowed earth; kindly confirm.	Confirmed	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
45	Civil works: Item No.- 6		In the provided BoQ, mode of measurement of Fencing is mentioned as Cu.m but we understand that the fencing shall be measured in rmt/sq.m. basis. Kindly request you to confirm the mode of measurement for security fencing.	Kindly refer to the corrected BOQ	
46	Civil Works – 7.03		Kindly provide the architectural drawing for the control room building; it is not enclosed in the tender document.	Attached	
47	Civil Works – 7.03	Chapter: 5, Cl.5.1 Standards, Design & Drawings, Pg.no-72.	As per the mentioned clause, "33kV Switchgear & Control Room building– Architectural Drawings are enclosed with the tender document, However the same is missed with the tender documents. Kindly request to share those missing drawings for reference purpose.	Control Room Building drawing attached	
48	Civil Works – 7.04		Kindly provide the technical specifications and standard drawings for kiosk buildings since they are not available in the tender document.	Drawings Attached and specification included in bid document.	
49	Civil works- item no-7.04,7.06,7.07,8		Kindly provide the following arch layouts for the proposed substation for reference purpose: 1. KIOSK Building 2. Officers Quarter G+1 3.Pump house Building & Fire water Tank 4. Staff Quarter G+2 5.Car Parking Shed drawing	Drawings for 1, 2 & 4 are attached. The drawing for 3 & 5 shall be prepared during detail engg. By EPC Contractor	
50	Civil works- item no-11		As per the price schedule Item no. 11. The Counstruction of 160 MVA Power with Burnt Oil Pit- 2 nos - 2 Nos , but only 1no. Is mentioned in the quantity column. Kindly confirm the quantity of the same.	Corrected in BOQ	
51	Civil works Item No. 9 to 12	Volume II, Chapter 5, Cl. 5.11 Rail Track / Road cum rail track	As per the mentioned clause, we understand that rail cum road is in the scope of bidder. However in price schedule, there is no separate item for Rail cum road. We understand that rail cum road shall be paid in Civil works Schedule, Item no.9-12 of respected transformer foundations. Kindly confirm if our understanding is	The rail cum road is integral part of transformer and reactor foundations and price is inclusive in the same item.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
			correct.		
52	T.S- cl.no- 5.14 (a), pg.no-101		Kindly provide the technical specifications and standard drawings for the septic tank and soak pit, since the same are not available in the tender document.	RCC septic tank To be designed by EPC as per standard building code.	
53	Civil works Item no. 14.01		Please provide the drawings for the water tank.	RCC pumphouse and reservoir tank To be designed by EPC as per standard.	
54	Civil works- Item no. 15.01		Please provide the drawings for the FFPH and water reservoir.	RCC pumphouse and reservoir tank To be designed by EPC as per standard.	
55	Civil works: Item no. B-3	Nalbari Bay extension	In price schedule, there is no separate item for Site Clearance including necessary excavation in hard rock with or without requiring blasting. We trust that the same shall be paid as an additional item if envisaged during execution stage. Kindly confirm if our understanding is correct.	Inclusive in Site clearance item of BOQ	
56	Civil works: Item no. B-2	Nalbari Bay extension	Please confirm the location of dumping of debris after dismantling of the existing structures and what is the lead distance from the proposed location of bay extension.	Shall be arranged by contractor after award of contract	
57	Price Schedule: Supply Nalbari extn.: Item no-10	Nalbari Bay extension	As per the price schedule, supply of towers and girders is provided in numbers according to the type such as C1,B1, etc..As the details of the type of towers and girders are not available in the tender document, request to pls provide the reference drawings for the same in order to calculate the structure weight.	As per design to be done during detailed engineering and is under the scope of Contractor	