MINUTES OF PREBID MEETING FOR PACKAGE H (R)

MINUTES OF PRE-BID MEETING HELD ON:	**29.01.2024**
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 GIS AT SONAPUR ALONG WITH THE ASSOCIATED TRANSMISSION LINES
BID NO. ICB	**AEGCL/MD/AIIB/PACKAGE-H(R)/2023/01-H(R)**

OPENING REMARKS:

Sri. B. Basumatary, 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-H(R) 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. B. Basumatary, Chief General Manager (PP&D), AEGCL, Paltanbazar, Guwahati-01.
2.Smt. Anindita Das, General Manager, EAP, O/o the MD, AEGCL, Paltanbazar, Guwahati-01
3.Sri H. Hashmi, Deputy General Manager-II, O/o the MD, AEGCL, Paltanbazar, Guwahati-01
4.Sri. H. Gogoi, Deputy General Manager (P&D), AEGCL, Paltanbazar, Guwahati-01.
5.Sri David Bathary, Deputy General Manager (Civil), O/o the MD, AEGCL, Paltanbazar, Guwahati-01
6.Sri. K. N. Baishya, Deputy General Manager (F&A), AEGCL, Paltanbazar, Guwahati-01.
7.Sri. D. Chanda, Assistant General Manager-I, O/o the MD, AEGCL, Paltanbazar, Guwahati-01.
8.Sri. Satyakam Das, Assistant General Manager (P&D), AEGCL, Paltanbazar, Guwahati-01.
9.Sri. Dipanku Goswami, Assistant General Manager (P&D), AEGCL, Paltanbazar, Guwahati-01.
10.Sri. Bedanta Kumar Dutta, DM (P&D), AEGCL, Paltanbazar, Guwahati-01.
11.Sri. Neelkamal Sarma, DM (P&D), AEGCL, Paltanbazar, Guwahati-01.
12.Sri. Hemant Bhave, Team Leader, PMC, Guwahati-01
13.Sri Vishal Adhikari Bose, Transmission Line Expert, PMC, Guwahati-01

2. FROM PROSPECTIVE BIDDERS:

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

1. Mrs. Sweeta Gupta and Rashmi Hazarika, M/s Badri rai & Company.
2. Mr. Sagnik Baneerjee, M/s Godrej and Boyce.
3. Mr. Akshay Rudra, M/s L&T.
4. Mr. G. Saha and Mr. Asish Kr. Ojha, M/s Shyama Power India Ltd
5. Mr. A. Mukherjee and Nilutpal Baidya, M/s Techno Electric & Engg.Co. Ltd
6. Mr. Swaraj Siripuram, Alfanar Group

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

1. M/s Associated Power Structures (P)Ltd
2. M/s Siemens Ltd.
3. M/s Rays Power Infra Limited

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	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.	We presume that the undertaking is required from manufacturer of GIS during detail engineering. Kindly confirm.	Undertaking will be from EPC contractor.	
2	Section 2: Tender Data Sheet (TDS): ITT 11.2 (k) (iii) & ITT 31.2 Viii	ITT 11.2 (k) (iii): The Tenderer shall submit with its tender the following additional documents. iii. Type Test Certificates ITT 31.2 (viii): Type Test Reports of GIS as per clause 2.5(a) III of section-3	In the online submissions, limited data space will be available in the tender procurement portal whereas each GIS OEM's Type test report will be more than 1GB. Since Multiple suppliers are allowed, it is not possible to upload complete report in the portal due to size constrain. Hence, the bidder shall submit the Summary of type test report with the bid in the tender portal and the complete type test report shall be submitted during detail Engineering stage, in case of award of contract. Kindly accept our request and confirm.	Yes.	
3	Section 2: Tender Data Sheet (TDS): ITT 31.2	Tenderer should submit hardcopy of the tender security in a physical envelope one hour prior to tender submission deadline	We understand that the tenderer should submit only hardcopy of the tender security in a physical envelope one hour prior to tender submission deadline and remaining all the required documents to be submitted in online e-procurement portal. Please confirm.	Only Tender security need to be submitted in Hardcopy. All other Tender related documents need to be uploaded in portal.	
4	Section 2: Tender Data Sheet (TDS): ITT 11.2(i)	ITT 11.2 (k) (iii): The Tenderer shall submit with its tender the following additional documents i. Valid Electrical license issued by the Authority anywhere in India.	We request you that for foreign bidders, the "valid electrical license" can be submitted within 45days from the date of award, in case of successful bidder. Please confirm.	Yes	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
Section 3: Evaluation and Qualification Criteria					
5	Section 3: Evaluation and Qualification Criteria of Tender Document **Pg. No. 47. in Sub-Clause No. 2.4.1 (a) of Clause No. 2.4 (Tenderer's Experience) under Section 3, 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. iii. The bidder shall submit an undertaking that the tower design, type testing and vetting by CPRI shall be completed within nine (09) months from the date of notification of award (NOA) of work	We have gone through this Qualification requirement for this tender and we would like to request you to kindly amend the existing qualification criteria as per below. This shall not only allow many EPC companies to qualify and submit their best prices but with this AEGCL shall also benefit by getting maximum participation along with very competitive prices restricting limited participation. "The tenderer shall have executed Contracts as follows: i. a. Successfully designed, tested & supplied 400kV or above tower. b. successfully commissioned at least 20 ckt km of length of 400kV or above Transmission Line in a single project over a period of last 5 years, The above work should have been under successful operation at the time of bid submission due date. 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. iii. The bidder shall submit an undertaking that the tower design, type testing and vetting by CPRI shall be completed within nine (09) months from the date of notification of award (NOA) of work" We look forward to your acceptance of the above request	PI refer Addendum	TABLE-2(Vol-I), **Sl** No. 1

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
			and accordingly amend this Clause allowing maximum participation by experienced and reputed turnkey/EPC bidders.		
5	Section 3: Evaluation and Qualification Criteria of Tender Document **Pg. No. 47 & 48**	Type test Approved lab for conducting type test	The type test reports from the labs who are member of the Short-Circuit Testing Liaison (STL) are only accepted. Kindly confirm if our understanding is correct.	No Change. As per bid.	
6	Evaluation and Qualification Criteria XLPE	XLPE i.The manufacturer must have the experience of designing, Laying, termination and commissioning of 220KV or higher voltage class underground XLPE cable of at least 5(five) km, which are in successful operation for at least 3 (three) years during last 7(seven) years as on the date of bid opening.	Request you to please modify the clause as " The manufacturer must have the experience of designing and supply of 220KV or higher voltage class underground XLPE cable of at least 5(five) km, which are in successful operation for at least 3 (three) years during last 7(seven) years as on the date of bid opening.	No Change. As per bid.	
7	Section 3: Evaluation and Qualification Criteria 2.4 Tenderer's Experience 2.4.1 (a) Contracts of Similar Size and Nature 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 substation of 400 KV or above voltage class. The above credential shall be from any state/ central power utility/ any Power Transmission utilities and the same should have been in successful operation for at least one year within last 10(ten) years as on the originally scheduled date of bid opening.	We being a foreign bidder, 380kV is our Grid voltage level in our country which is equivalent to 400kV in India. Hence, we request you accept 380kV Voltage class substation also for evaluation purpose. Hence, we request amend/read this clause as follows. The tenderer must have designed, supplied, erected, tested & commissioned GIS including Civil works complete at least One Gas Insulated substation of 380 KV or above voltage class. The above credential shall be from any state/ central power utility/ any Power Transmission utilities and the same should have been in successful operation for at least one year within last 10(ten) years as on the originally scheduled date of bid opening	Yes.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
8	Evaluation and Qualification Criteria 2.4 Tenderer's Experience 2.4.1 (a) Contracts of Similar Size and Nature PART B: (Associated Transmission Lines for 400kV,220kV and 132k V Voltage Level)	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.	We being a foreign bidder, 380kV is our Grid voltage level in our country which is equivalent to 400kV in India. Hence, we request you accept 380kV Voltage class Transmission Line also for evaluation purpose. Hence, we request amend/read this clause as follows. i. successfully commissioned at least 20 ckt km of length of 380kV 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.	Yes.	
9	2.4.2 Experience in Key Activities 2.4.2(a): For Part A: Substation	i. At least 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 and operational.	We being a foreign bidder, 380kV is our Grid voltage level in our country which is equivalent to 400kV in India. Hence, we request you accept 380kV Voltage class also for evaluation purpose. Hence, we request amend/read this clause as follows. i. At least 2nos., 380KV class capacity of minimum 315 MVA Power/Auto Transformers, ii. 05(five) nos. GIS circuit breaker bays of 380 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 and operational.	Yes	
10	2.4.2 Experience in Key Activities 2.4.2(a): For Part B: Associated Transmission lines.	The bidder must have experience of construction of 132KV and 220KV or above voltage class transmission line of minimum total 40 Circuit KM length with the following listed equipment, which are in successful operation for at least two years within last seven years as on the date of bid opening. (i) Power Conductors, (ii) disc/long rod Insulators. (iii) Transmission Line Towers. (iv) OPGW laying.	We understand that if the bidder has experience of construction of 220kV or above voltage class transmission line of minimum total 40 Circuit KM length also acceptable for evaluation. Therefore, this clause can be read as follows. The bidder must have experience of construction of 132KV and/or 220KV or above voltage class transmission line of minimum total 40 Circuit KM length with the following listed equipment, which are in successful operation for at least two year within last seven years as on the date of bid opening.	Pl refer Addendum	Table 2(Vol-I), Sl No. 2

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
			(i) Power Conductors, (ii) disc/long rod Insulators. (iii) Transmission Line Towers. (iv) OPGW laying. Please confirm our understanding.		
11	Section-3: EQC: 2.3.2 Average Annual Turnover	Minimum average annual turnover of INR 400 Crore (Rupees Four Hundred Crore) or equivalent amount in freely convertible currencies calculated as total certified payments received for contracts in progress or completed, within the last five (5) years.	There is contradictory between 2.3.2 clause and FIN-2. We understand that Bidder has to submit the Average Annual Turnover details as per FIN-2 i.e., amount billed to client for each year for the works in progress or completed which is generally treat as " Turnover" in bidder's country. Please confirm our understanding.	Pl refer Addendum	Table 2(Vol-I), Sl No. 3,
12	Section-3: 2.3 Financial Situation	In 2.3.1, 2.3.2, 2.3.3, the financial figures are mentioned in INR.	We being a foreign bidder, we understand that we can provide our financial data details in either converted to US dollars or converted to INR at the rate of exchange at the end of period reported. Please confirm our understanding.	Yes	
13	2.4 Tenderer's Experience 2.4.1 (a) Contracts of Similar Size and Nature PART B: (Associated Transmission Lines for 400kV,220kV and 132kV Voltage Level)	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 Ten (10) financial years and the executed value of such project in anyone (1) financial year shall not be less than Rs. 50Crore.	We are being a bidder form KSA, we executed big value with long duration of projects in transmission line during last 10 financial years in our country for which the execution period are more than 36 months or above (i.e., we have not executed any small value & small duration (12-18Months) projects). Hence, we request you to amend this clause as follows. *The Bidder should have successfully executed/completed any transmission line project under Central/State Power Utility or TBCB in **any one project** during last Ten (10) financial years and the executed value of such project in anyone (1) financial year shall not be less than **Rs. 50Crore.*** **OR** *The Bidder should have successfully executed/completed **any transmission project (Substation and/or line)** Central/State Power Utility or TBCB in **any one project** within **36 months** during last 10 financial years and the executed value of such project in any one financial year shall not be less*	Please refer Addendum	Table 2(Vol-I), Sl No. 4,

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
			*than **50Crore**.*		
14	Section3: Clause no. 2.4.1	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 substation of 400 KV or above voltage class. The above credential shall be from any state/ central power utility/ any Power Transmission utilities and the same should have been in successful operation for at least one year within last 10(ten) years as on the originally scheduled date of bid opening.	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 substation of 400 KV or above voltage class. The above credential shall be from any state/ central power utility/ any Power Transmission utilities and the same should have been in successful operation for at least one year within last 10(ten) years as on the originally scheduled date of bid opening. Note: On-going works of 400kV Air Insulated Substation shall be considered for qualification purpose.	No change. As per Bid	
15	Section3: Clause no. 2.4.1	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. 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)	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 10 ckt km of length of 110kV/132kV or above in multiple projects 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. The Bidder should have successfully executed/completed any transmission line project under Central/State Power	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
		months during last Ten (10) financial years and the executed value of such project in any One (1) financial year shall not be less than Rs. 50Crore	Utility/Private Sector or TBCB in any one project within 18(eighteen) months during last Ten (10) financial years and the executed value of such multiple projects in any One (1) financial year shall not be less than Rs. 25 Crore		
16	Section3: Clause no. 2.4.2	For Part A: Substation A. The tenderer must have the experience of design, install, test and commission of the following listed equipment's which are in successful operation for at least two year within last seven year as on the date of original bid submission. i. At least 2 nos., 400KV class capacity of minimum 315 MVA Power/Auto Transformers, ii. 05(five) nos. GIS circuit breaker bays of 400 kV or above voltage level. iii. Control & Relay Panel and iv. RTU / BCU and Substation Automation System v. Construction of control room building with all civil works complete.	For Part A: Substation A. The tenderer must have the experience of design, install, test and commission of the following listed equipment's which are in successful operation for at least one year within last Ten year as on the date of original bid submission. i. At least 2 nos., 220kV class capacity of minimum 80 MVA Power/Auto Transformers, ii. 05(five) nos. AIS circuit breaker bays of 220kV or above voltage level. iii. Control & Relay Panel and iv. RTU / BCU and Substation Automation System v. Construction of control room building with all civil works complete.	Please refer Addendum	Sl No.5

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
17		For Part B: Associated Transmission lines The bidder must have experience of construction of 132kV & 220kV or above voltage class transmission line of minimum total 40 Circuit KM length with the following listed equipment, which are in successful operation for at least two years within last seven years as on the date of bid opening. (i) Power Conductors, (ii) disc/long rod Insulators. (iii) Transmission Line Towers. (iv) OPGW laying	For Part B: Associated Transmission lines The bidder must have experience of construction of 220kV or above voltage class transmission line of minimum total 35 Circuit KM length with the following listed equipment, which are in successful operation for **at least One year within last Ten years** as on the date of bid opening. (i) Power Conductors, (ii) disc/long rod Insulators. (iii) Transmission Line Towers. (iv) OPGW laying	No change. As per Bid	
18	2.5 (a) Manufacturers/Subcontractor, GIS EXP-3	The manufacturer should have designed, supplied, erected, tested and commissioned on supply cum supervision (erection, testing and commissioning) basis at least 2 (two) nos. GIS installations of 400kV or above voltage level during last 10(Ten) 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.	The manufacturer whose 400kV GIS bays are offered must have designed, manufactured, type tested (as per IEC or equivalent standard), supplied and supervised erection & commissioning of at least Two (2) nos. Gas Insulated Switchgear (GIS) circuit breaker bays of 345kV or above voltage class in one (1) Substation or Switchyard during the last seven (7) years and these bays must be in satisfactory operation for at least two (2) years as on the originally scheduled Bid Opening Date"	Pl refer addendum	Table 2 (Vol-I), Sl No. 5
Section 4: Tender Forms.					
19	Manufacturer Authorization	The manufacturer authorization shall be submitted from the equipment manufacturer, which should be filled in non-judicial stamp paper of worth Rs.100/-.along with the tender	Request you to please Allow us to submit MAF in Manufacturer's Letter Head during Tendering Stage.	Notarized MA must be submitted at the time of Contract signing by successful bidder.	
20	Tender Security	This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.5	You are requested to kindly remove this clause	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
21	Tender Security		As per Amended section 28 of Indian Contract Act, we request you to kindly allow us to insert below mentioned clause in the format of Bank Guarantee - Notwithstanding anything contained herein: 1. Liability of the Bank under this guarantee shall not exceed INR _____. 2. This guarantee shall be valid up to _____("Expiry Date"); 3. All claims under this guarantee should be made within a period of one year from the Expiry Date. 4. This guarantee shall be governed by the laws of India and shall be subject to the exclusive jurisdiction of the Indian courts at Mumbai.	No change. As per Bid	
Section 6: Employer's Requirement					
22	Section 6: Employer's Requirement, 7. Personnel Requirements	Tender Clause: 5. Community Consultation Officer: Master of Social Work or similar suitable qualification with at least 8 years of experience in Stakeholder Consultations in Assam for linear infrastructure projects. Good understanding of social sensitivities of Assam and community structure and specialized consultation needs would be essential.	We request you to accept the experience in stake holder consultations in anywhere in India and not limiting only to Assam. Incase Assam experience is mandatory, we request you to accept undertaking from bidder to engage the required community consultant from assam at the tendering stage. We shall submit the CV of the concern Community Consultant officer at the time of site mobilization. Please confirm.	Pl refer addendum	Table 2 (Vol-I), Sl No. 6
Section 7: General Condition of Contract					
23	General Condition of Contract, 14. Taxes and Duties	Tender 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 understand 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.	Taxes will be as per prevailing Govt rules.	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
24	General Condition of Contract, 14. Taxes and Duties	Building and Other Construction Workers (BOCW) Cess	Since contract is Silent, as per our understanding BOCW cess @ 1% only on civil portion of the contract, this in conformity with the Hon'ble Supreme Court judgment, vide SLP (C) No. 8630 of 2020 in the matter of Uttar Pradesh Power Corporation Limited (UPPTCL) order dt. 12th May 2021. As per BOCW law in government contract, employer needs to be recovered and deposited hence clarity required. In the recent Delhi Metro Rail Corporation (DMRC) DE-04 tender, DMRC confirmed 15% contract value will be considered as Civil contract and 1% BOCW shall be deducted on the 15% of contract value. Request your acceptance the BOCW on the Civil portion of contract.	Taxes will be as per prevailing Govt rules.	
25	Clause 9. Contractor's Responsibilities Sub clause - 9.3	9.3 The Contractor shall acquire and pay for all permits, approvals, and/or licenses from all local, state, or national government authorities or public service undertakings in the country where the Site is located, which such authorities or undertakings require the Contractor to obtain in its name and which are necessary for the performance of the Contract, including, without limitation, visas for the Contractor's and Subcontractor's personnel and entry permits for all imported Contractor's Equipment. The Contractor shall acquire all other permits, approvals, and/or licenses that are not the responsibility of the Employer under GCC Subclause 10.3 hereof and that are necessary for the performance of the Contract.	Any cost related to statutory clearance shall be borne by Employer.	No change. As per Bid	
26	Clause 9. Contractor's Responsibilities Sub clause - 9.6	9.6 The Contractor shall permit AIIB to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by AIIB, if so, required by AIIB.	You are requested to amend clause as below- The Contractor shall permit AIIB to inspect the Contractor's accounts and records relating to the performance of the	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
			Contractor limited to the Contract and to have them audited by auditors appointed by AIIB at the Employer's cost, if so, required by AIIB.		
27	16. Confidential Information Sub clause - 16.3	16.3 The obligation of a party under GCC Subclauses 16.1 and 16.2 above, however, shall not apply to that information, which (a) now or hereafter enters the public domain through no fault of that party; (b) can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party hereto; and (c) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.	You are requested to amend clause as below- 16.3 The obligation of a party under GCC Subclauses 16.1 and 16.2 above, however, shall not apply to that information, which (a) now or hereafter enters the public domain through no fault of that party; (b) can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party hereto; and (c) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality. (d) Is independently developed by the receiving party	No change. As per Bid	
28	16. Confidential Information Sub clause - 16.5	16.5 The provisions of this GCC Clause 16 shall survive termination, for whatever reason, of the Contract.	You are requested to amend clause as below- 16.5 The provisions of this GCC Clause 16 shall survive termination, for whatever reason, of the Contract for a period of three (3) years from the termination or expiration of the Contract.	No change. As per Bid	
29	F. Guarantees and Liabilities 26. Completion Time Guarantee	26.2 If the Contractor fails to attain Completion of the Facilities or any part thereof within the Time for Completion or any extension thereof under GCC Clause 40, the Contractor shall pay to the Employer liquidated damages in the amount specified in the SCC as a percentage rate of the Contract Price or the relevant part thereof. The aggregate amount of such liquidated damages shall in no event exceed the amount specified as "Maximum" in the SCC as a percentage rate of the Contract Price. Once the "Maximum" is reached, the Employer may consider termination of the Contract, pursuant to GCC Subclause 42.2.2. Such payment shall completely satisfy the Contractor's	You are requested to remove below mentioned clause- However, the payment of liquidated damages shall not in any way relieve the Contractor from any of its obligations to complete the Facilities or from any other obligations and liabilities of the Contractor under the Contract.	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
		obligation to attain Completion of the Facilities or the relevant part thereof within the Time for Completion or any extension thereof under GCC Clause 40. The Contractor shall have no further liability whatsoever to the Employer in respect thereof. However, the payment of liquidated damages shall not in any way relieve the Contractor from any of its obligations to complete the Facilities or from any other obligations and liabilities of the Contractor under the Contract. Save for liquidated damages payable under this GCC Subclause 26.2, the failure by the Contractor to attain any milestone or other act, matter or thing by any date specified in the Appendix (Time Schedule) to the Contract Agreement and/or other program of work prepared pursuant to GCC Subclause 18.2 shall not render the Contractor liable for any loss or damage thereby suffered by the Employer.			
30	30. Limitation of Liability	30.1 Except in cases of criminal negligence or willful misconduct, (a) the Contractor shall not be liable to the Employer, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Contractor to pay liquidated damages to the Employer, and (b) the aggregate liability of the Contractor to the Employer, whether under the Contract, in tort or otherwise, shall not exceed a multiple of the Contract Price specified in the SCC or, if a multiple is not so specified, the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Contractor to indemnify the Employer with respect to patent infringement.	You are requested to amend clause as below- (a) the Contractor shall not be liable to the Employer, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Contractor to pay liquidated damages to the Employer, and (b) the aggregate liability of the Contractor to the Employer, whether under the Contract, in tort or otherwise, shall not exceed a multiple of the Contract Price specified in the SCC or, if a multiple is not so specified, the total Contract Price	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
31	33. Loss of or Damage to Property; Accident or Injury to Workers; Indemnification Sub clause - 33.1	33.1 Subject to GCC Subclause 33.3, the Contractor shall indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions, or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, in respect of the death or injury of any person or loss of or damage to any property other than the Facilities whether accepted or not, arising in connection with the supply and installation of the Facilities and by reason of the negligence of the Contractor or its Subcontractors, or their employees, officers, or agents, except any injury, death, or property damage caused by the negligence of the Employer, its contractors, employees, officers, or agents.	You are requested to amend clause as below- 33.1 Subject to GCC Subclause 33.3, the Contractor shall indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions, or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, in respect of the death or injury of any person or loss of or damage to any property other than the Facilities directly attributable to the Contractor,, arising in connection with the supply and installation of the Facilities and by reason of the negligence of the Contractor or its Subcontractors, or their employees, officers, or agents, except any injury, death, or property damage caused by the negligence of the Employer, its contractors, employees, officers, or agents.	No change. As per Bid	
32	33. Loss of or Damage to Property; Accident or Injury to Workers; Indemnification		You are requested to add below mention clause - 33.5 Employer shall indemnify the other party against all direct loss, costs, claims and damages arising out of: - i. breach of law; ii. infringement of intellectual property of third party iii. gross negligence and willful misconduct on part of such indemnifying party.	No change. As per Bid	
33	37. Force Majeure Subclause 37.1 (d)	(d) strike, sabotage, lockout, embargo, import restriction, port congestion, lack of usual means of public transportation and communication, industrial dispute, shipwreck, shortage or restriction of power supply, epidemics, quarantine, and plague	You are requested to amend clause as below- (d) strike, sabotage, lockout, embargo, import restriction, port congestion, lack of usual means of public transportation and communication, industrial dispute, shipwreck, shortage or restriction of power supply, epidemics, pandemic, quarantine, and plague	No change. As per Bid	
34	42. Termination 42.2 Termination for Contractor's Default	42.2.6 If the Employer completes the Facilities, the cost of completing the Facilities by the Employer shall be determined. If the sum that the Contractor is entitled to be paid, pursuant to GCC Subclause 42.2.5, plus the reasonable costs	You are requested to amend clause as below- 42.2.6 If the Employer completes the Facilities, the cost of completing the Facilities by the Employer shall be determined.	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
		incurred by the Employer in completing the Facilities, exceeds the Contract Price, the Contractor shall be liable for such excess. If such excess is greater than the sums due the Contractor under GCC Subclause 42.2.5, the Contractor shall pay the balance to the Employer, and if such excess is less than the sums due the Contractor under GCC Subclause 42.2.5, the Employer shall pay the balance to the Contractor. The Employer and the Contractor shall agree, in writing, on the computation described above and the manner in which any sums shall be paid.	If the sum that the Contractor is entitled to be paid, pursuant to GCC Subclause 42.2.5, plus the reasonable costs incurred by the Employer in completing the Facilities, exceeds the Contract Price, the Employer shall be liable for such excess. if such excess is less than the sums due the Contractor under GCC Subclause 42.2.5, the Employer shall pay the balance to the Contractor. The Employer and the Contractor shall agree, in writing, on the computation described above and the manner in which any sums shall be paid.		
35	45. Disputes and Arbitration 45.5 Arbitration (b) & (c)	(b) if no arbitration proceedings is so stated, the dispute shall be finally settled by institutional arbitration under the Rules of Arbitration of the International Chamber of Commerce; (c) the dispute shall be settled by three arbitrators; and	You are requested to amend clause as below- (b) if no arbitration proceedings is so stated, the dispute shall be finally settled by institutional arbitration under the Rules of Arbitration of the Arbitration and Conciliation Act, 1996.; (c) the dispute shall be settled by three arbitrators; one each appointed by both parties and the third appointed by mutual consent of the two appointed arbitrators; and	No change. As per Bid	
Section 8: Special Condition of Contract					
36	Special Condition of Contract, 7. Scope of Facilities	Tender Clause: 7.3 The Contractor agrees to supply spare parts for a period of years: Ten (10) Years. An undertaking to the effect that the spare parts shall be made available to AEGCL by the contractor for a period of ten (10) years should be furnished by the contractor. The undertaking shall be under ought by the contractor executed through Non-judicial stamp paper of Rs. 100/- or above to be notarized in India. The Contractor shall carry sufficient inventories to ensure an ex-stock supply of consumable spares for the Plant. Other spare parts and components shall be supplied as promptly as possible, but at the most within 6 months of placing the order. In addition, in the event of termination of the production of spare parts, advance notification will be made	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 Equipment Supplier/ Manufacturer at the time of drawing approval for the main supply materials like GIS, Transformers, CRP and SAS only. Please confirm.	No change,	

SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
		to the Employer of the pending termination, with sufficient time to permit the Employer to procure the needed requirement. Following such termination, the Contractor will furnish to the extent possible and at no cost to the Employer the blueprints, drawings and specifications of the spare parts, if requested.			
37	Special Condition of Contract, 27. Defect Liability	Tender Clause: 27.10 a) The critical components covered under the extended defect liability are Power Transformers, IEDs and circuit Breakers, and the period shall be 180 (one hundred eighty) days beyond the defect liability period (as per clause 27.2 of GCC).	We presume that Performance BG period shall not be extended for the extended defect Liability of Power Transformers, IEDs and circuit Breaker. Incase if the performance BG for critical components are required, please inform the BG value.	No Change. As per bid	
38	7. Scope of Facilities Sub Clause 7.3	The Contractor agrees to supply spare parts for a period of years: Ten (10) Years. An undertaking to the effect that the spare parts shall be made available to AEGCL by the contractor for a period of ten (10) years should be furnished by the contractor. The undertaking shall be executed through Non-judicial stamp paper of Rs. 100/- or above to be submitted along with the tender. Undertaking notarized in India shall be submitted before signing of the contract. The Contractor shall carry sufficient inventories to ensure an ex-stock supply of consumable spares for the Plant. Other spare parts and components shall be supplied as promptly as possible, but at the most within 6 months of placing the order. In addition, in the event of termination of the production of spare parts, advance notification will be made to the Employer of the pending termination, with sufficient time to permit the Employer to procure the needed requirement. Following such termination, the Contractor will furnish to the extent possible and at no cost to the Employer the blueprints, drawings and specifications of the spare parts, if requested.	Considering the continuous upgrading technology in the dynamic market request you to kindly reduce the time frame from 10 years to 5 years or include the spare item in BPS considering the 5-year O&M.	No Change. As per Bid	
39	13. Securities	13.3.3 For GIS equipment manufactured and supplied, the contractor shall have to extend the Performance BG within	You are requested to amend clause as below -	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
		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 Contractors 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 10% 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.	13.3.3 For GIS equipment manufactured and supplied, 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 Contractors extended defect liability in accordance with the provision in the SCC, pursuant to GCC Subclause 27.10. The amount of the BG shall be 10% of the GIS equipment cost and shall be in non-Judiciary stamp papers of worth minimum Rs. 100/-		
40	27. Defect Liability	27.7 If the Contractor fails to commence the work necessary to remedy such defect or any damage to the Facilities caused by such defect within hundred (100) hours from the time of reporting of the incident, the Employer may, following notice to the Contractor, proceed to do such work, and the reasonable costs incurred by the Employer in connection therewith shall be paid to the Employer by the Contractor or may be deducted by the Employer from any monies due the Contractor or claimed under the Performance Security. The recovery of cost for this defect liability period shall also be applicable for the extended defect liability period.	You are requested to amend clause as below - 27.7 If the Contractor fails to commence the work necessary to remedy such defect or any damage to the Facilities caused by such defect within hundred (100) hours from the time of reporting of the incident, the Employer may, following notice to the Contractor, proceed to do such work, and the reasonable costs incurred by the Employer in connection therewith shall be paid to the Employer by the Contractor. The recovery of cost for this defect liability period shall also be applicable for the extended defect liability period.	No change. As per Bid	
Section 9: Contract Forms					
41	Contract Forms, Appendix 1: Terms and Procedures of Payment, (A) Terms of Payment	Tender Clause: B. Progressive payments for supply items: i. Within 60 (sixty) days from the date of submission of the invoice against supply, not more than 60% (sixty percent) payment of the total supply invoice value would be made,	Bidder submitting performance bank guarantee for 10% of contract value, we request to release 90% (ninety percent) payment of the total supply invoice value after successful receipt at site along with 100% GST amount of invoices.	No Change. As per bid	

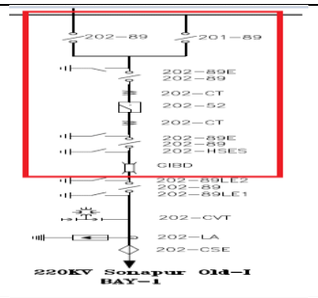
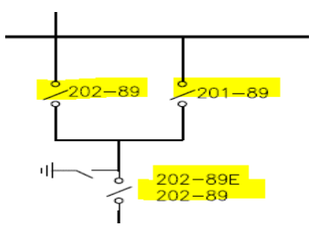
SL NO	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
		on receipt and acceptance of materials in full and good conditions (Subject to availability of fund). However, GST amount on invoice would be paid 100% or as per Govt. Rules. ii. Remaining 40% (forty percent) retention amount would be released subject to fulfilment of the following conditions – (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. (c) within 60 (sixty) days after receipt of invoice out of remaining 10% of the supply amount 5% would be paid upon issue of the Completion Certificate and balance 5% upon issue of the Operational Acceptance Certificate as per clause 25, 26 & 27 of GCC, which should be certified by the Project Authority	Remaining 10% of the supply amount 5% would be paid upon issue of the Completion Certificate and balance 5% upon issue of the Operational Acceptance Certificate as per clause 25, 26 & 27 of GCC, which should be certified by the Project Authority This will enable bidders to remove the financial loading on the prices. please confirm.		
42	Contract Forms, Appendix 2: Price Adjustment	Tender Clause: Prices payable to the Contractor, in accordance with the Contract, shall be subject to adjustment during performance of the Contract to reflect changes in the cost of labor and material components, Price variation shall be paid to contractor for the specified major items as mentioned below as per formula specified by IEEMA along with documentary evidence for different indices applicable for Price Adjustment from IEEMA. The IEEMA circular are available in the following link https://ieema.org/about-ieema/services/pv-clauses-prices-indices/ Schedule No.: 2 (Plant and Equipment supplied from inside the Employer's Country) Substation:	All major Steel making raw material prices increasing substantially from the month of Aug'23 onwards. Hence, we request you to consider the Price variation for steel material for supply of tower, equipment structure and service portion of concreting and re-inforcement works. These similar conditions are already accepted by other utilities like PGCIL etc. Further, we would like to inform you that WPI Index has increased by 8.38% for Industrial Worker from Apr'22 to Oct'23 increasing the labour cost which ultimately increases the erection & civil cost. These implication forcing contractors to included additional escalation in bid price to mitigate the risk. Hence, we request to consider the price variation for concreting, re-inforcement works and other installation. These similar conditions are already accepted by other	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
		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. No price variation will be allowed on Schedule No.: 4 (Installation and Services)	utilities like PGCIL etc. A copy of same is enclosed. Kindly accept and issue the amendment on this.		
43	Terms of Payment	Advance Payment	Request you to please clarify whether 10% advance payment is interest free or interest bearing. If interest bearing, please clarify percentage of interest.	Interest Free	
44	Appendix-1 Terms & procedures of payment, Schedule-2, Progressive payment for supply items:	Mode of Payment	Please clarify the mode of payment i.e., Letter of credit or on Cheque or RTGS to foreign bidders	Mode of Payment will be RTGS	
45	Appendix-1 Terms & procedures of payment, Schedule-2, Progressive payment for supply items:	Payment for Freight and Insurance schedule i.e., BOQs	Please clarify the terms of payment for Freight and insurance.	Please refer Addendum	Table 2(Vol-I), Sl No. 9
46	General	Contract Execution-Foreign Bidder	The Bidder is an entity incorporated out of India (i.e., foreign bidder). Once the Bidder is awarded the project, (i) will it need to execute the project through itself?; **or** (ii) can it incorporate an SPV in India to execute this project?; **or** (iii) can the Bidder use its already existing Indian entity (which is a wholly owned subsidiary of the Bidder) to execute the awarded project? Please clarify clarify the above point.	In case of successful bidder who is an entity incorporated out of India (foreign bidder), the project need to be executed through itself and if requires they may explore the provision specified in ITT and TDS Clause no. 4.1 of volume-1 of tender document	

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

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
1	2.7 Right of Way for Transmission Lines:	2.7 Right of Way for Transmission Lines: 2.7.1 to 2.7.24	From 2.7 clauses, we understand that payment for Crop compensation, Land compensation, National/Road/Local Road clearance, river clearance, forest clearance, local villagers land clearance will be paid by AEGCL to Successful bidder or directly concerned persons or concern Authority. Please confirm the same.	As per Bid	
2	Price Schedule	Summary	In the Price Schedule, summary sheet, there is no GST line item is not there. Hence, we understand that the evaluation of price bid shall be without GST. Please confirm our understanding.	Revised BOQ uploaded showing the GST column.	
3		Right of Way	Any kind of ROW due to availability of land or dispute arising due to local / political / police interference is not included in Bidder scope; same shall be in AEGCL's scope. Please confirm.	As per Bid	
4		Approach Road	We have not considered construction of any Approach Roads up to switchyard Location external to substation area in Bidder scope	Approach road is executed as Another Package (PKH-H1)	
5		Price Implication at later stage	Any variation in specifications/quantity during later stages will attract suitable price revision accordingly.	As per Bid	
6		Statutory Approvals	Any work related to obtaining statutory approvals from local authorities or govt departments shall not be in bidders' scope. Please confirm.	As per Bid	
7		NOCs	Obtaining NOC, Safety certification, LC, forest clearance if any, cutting of trees if required etc. Shall not be in bidder's scope. Please confirm.	AS per Bid	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
8		Yard Levelling	● We have not considered Tree cutting in Bidder scope. ● Kindly request you to please provide contour drawing for yard levelling, filling & cutting. ● We have considered Blasting in Bidder scope. ● However, if any Approvals/ permissions related to surplus soil required, it shall be done by Client only.	Please refer addendum Permissions will be as per Bid	Table 2(Vol-I), Sl No. 11
9		26.2 Applicable rate for liquidated damages shall not exceed: ½% (half percent) per week. Maximum deduction for liquidated damages: 10 (ten) percent of contract price.	During the execution of contract, if the delay of contract completion due to AEGCL's due to handling ROW or clearances or any reasons, the successful bidder will get the time limit extension of contract period and will not levy any LD.	As Per Bid	
10		SBC & ERT	Please provide Soil Resistivity for Estimation of Main Earthing conductor size and spacing	SBC & ERT Report is uploaded.	Table 2(Vol-I), Sl No. 12
11		SBC & ERT	Please provide following details to do our basic pre-bid engineering. 1. Soil Investigation Report or, basic soil data 2. Soil Bearing Capacity & 3. ERT values/data	SBC & ERT Report is uploaded.	Table 2(Vol-I), Sl No. 12
12	BOQ_56799, BOQ2	Existing GIS details As per BOQ 1 no. Extension line bay mentioned 16.4.46.4 Further the contractor who is extending the existing GIS installation, it shall be his responsibility to provide interface module matching with the existing GIS interface module. The	We would like to inform that we have not received any previous GIS make extension drawings & building size of existing substation We request you to kindly provide the (Existing substation SLD/layout, Flange details of GIS). Also kindly confirm if spares O-ring for Busbar expansion is available.	Will be shared during detail engineering.	
13	BOQ_56799, BOQ1	GIB length & Scope of GIS	1)As per received documents we are unable to check total GIB length as there is no reference for SF6 to Air bushing distances Kindly provide the reference document or CAD file of overall layout or define the length as per all the previous projects. 2)Also GIS scope of supply is up to SF6 to Air bushing. (Please refer to snap marked in red)	1) GIBD length shall be as per the Layout Drawing. No CAD will be shared. 2) Agreed.	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
					
14	SLD & Layout	Building size & bay designations in layout	As per received layout we observed that building dimensions is not mentioned so we are considering as per our standard practise Kindly confirm the same Also please provide the bay designations in layout as per SLD	The building size has been marked in the Plan Layout Drawing.	
15	SLD & Layout	Busbar DS & ES 	We would like to inform that as per our standard design of 245kV GIS we shall provide one common ES with separate DS for both busbars so separate DS+ES in not envisaged (Please refer to snap) Also, as per received layout drawing 3 phase encapsulated busbar system shown kindly confirm busbar system whether encapsulated 3 phase busbar or segregated single phase busbar required also kindly let us know in case gas segregation is required in the bus bar between bay to bay.	1) The number of DS and ES shall be as per the OEM's Type tested Design 2)Single Phase encapsulated bus bars (three isolated phase) bus bar enclosure design will be preferred. 3) The bus bars shall be segregated after each bay module (line/transformer/tie/bus coupler etc.)	
16	BOQ_56799	Spare part requirement	We would like to inform that Spare part requirement is not mentioned in BOQ. Kindly confirm	Included in BoQ 14 Sheet	
17	BOQ_56799	Special tools	We understood that the special tool qty is combined for both substations.	Agreed	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
18	PKG-H-Vol II GIS TS, Page no.351	Gas Monitoring Devices (Display at SAS)	We would like to inform you that, 1- LCC controls has provisions to allow command from SAS. 2- We shall interface all the Gas density monitor given for each gas tight compartment of GIS to LCC. However, the interfacing of SAS to the same shall be in the scope of SAS provider not with GIS OEM.	The 4-20mA Output shall be provided for each Gas Density Monitor for Remote Indication to SAS and shall be under the scope of the GIS OEM.	
19	PKG-H-Vol II GIS TS, Page no.351	Gas system Maximum water content of SF6 -gas in GIS, within guarantee period: CB ≤ 150 PPM (volume) Others ≤ 500 PPM (volume)	We would like to inform that our GIS model is type tested according IEC standard in which it is mentioned that Dew point temperature is not higher than -10 deg we comply the same. Please accept the same. For information: PPM values not given in IEC standard	As per BID	
20	PKG-H-Vol II GIS TS, Page no.355	Portable scissor lift	We request you to please check the requirement of Scissor lift as it is special tool and same is not mentioned in BOQ	Refer to Updated BoQ.	
21	PKG-H-Vol II GIS TS 16.4.49 point no. 10 Page no.360	GIB standard lengths GIS manufacturer as per their design shall preferably use maximum three standard straight horizontal outdoor bus duct lengths for entire GIS installation to optimize the spare requirement	We would like to inform you that, the standard GIB duct used for the design cannot be limited to maximum three types. As GIB duct routing is governed by various points such as Gas to Air bushing location, Site conditions, GIS manufacturer practice etc. hence keeping the GIB type to three is not possible, we shall use least no. of types as possible for GIB layout Kindly confirm the same	Shall preferably be as per BID. However, the same shall be finalized during Detail Engineering.	
22	PKG-H-Vol II GIS TS 16.4.52 point no. xiv Page no.363	GIS key Diagram enlisting and marking each and every GIS Module clearly and separately identifiable (indoor and outdoor). This separately identified module shall be complete along with its enclosure, gasket and all active parts such as conductor, conductor joints, corona shield etc	We would like to inform that we shall not provide the GIS key diagram as this is our internal drawing. Kindly accept the same.	To understand the link/bend arrangement inside the GIS and external component location like PD sensors, PRD port, stroboscopic port, gas density monitor probe connection etc., the diagrams are required.	
23	PKG-H-Vol II GIS TS 16.5.1.14.2.19 Page no.372 16.5.1.13 Page no.373	E2 Class for DS & ES Electrical endurance class shall be E2 E2 Class for HES Electrical endurance class shall be E2	As per the IEC 62271-102, kindly note for Disconnector – E2 test is not applicable. For Earth switch E2 test is applicable for voltage <52 kV. Hence in this case (400/220kV) E2 test is not applicable. (Pls. ref Annex-1 for IEC extract)	As per BID	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
24	PKG-H-Vol II GIS TS 400&220kv GIS Page no.50	CT ratio, CT core	We have considered 7 core CT duly distributed to both side of CB for 400kV for all type of bays	Please refer addendum.	Table 2(Vol-II), Sl No. 8
25	PKG-H-Vol II GIS TS 16.5.1.17.2 Page no.374	VT data The rating, ratio, accuracy class, connection etc. for the voltage transformers shall be in accordance with Annexure 4 & Table 4A	We could not found the given reference in TS , we request you to please provide VT data	Will be shared during detailed engineering	
26	PKG-H-Vol II GIS TS Page no.393	Power Frequency Test: On Site Testing of GIS Power frequency tests for the completed GIS at site shall be complied as per IEC 60270. Power frequency tests for the completed GIS at site shall be possible without removing the voltage transformers	For power freq. test VT shall be disconnected from main circuit by means of DS	As per BID	
27	PKG-H-Vol II GIS TS Page no.394	Mandotary spares Standard list of Mandatory Spares shall be provided as per the BPS.	We would like to inform that we have not received Mandatory spare part list Kindly provide the same	Included in BoQ 14 Sheet	
28	Volume-II 16.4	GIS- Busbar Continuous bus lengths without gas segregation shall not be acceptable for any voltage level.	We understand requirement is to have gas segregation between each bay. In the busbars. Sample Gas SLD enclosed. Kindly confirm our understanding and provide the sample Gas SLD to follow.	The bus bars shall be segregated after each bay module (line/transformer/tie/bus coupler etc.) for both 400kV and 220kV GIS	
29	Price schedule	Supply Rangia Online partial discharge monitoring unit-02 Nos	Kindly note because of the technical complexity and high price (one system of online PD is equivalent to cost of 3 no's of 400kV bays) of online monitoring now users including PGCIL not opting for Online PDM. Hence, we request you to kindly consider it to portable PDM which is in line with the spec of PGCIL and this will be useful in substation.	As per BID	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
30	Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004)Rev 6		As per referred electrical layout, Double break isolator with **one earth switch** is indicated for 400kV and 220kV Line bays. However, in BoQ-1, supply sub Sonapur,as per Sl. No 1.01 & 1.02 and SLD, Horizontal Double Break type Isolator with **double earth switch** is mentioned for Line bays . Hence, please check and confirm the requirement.	As per BoQ	
31	400/220kV Single Line Diagram (Drawing no NAC/AEGCL/Sonapur/SLD-003.R2)		As per referred SLD, **3 no's** of safety grounding switches are indicated for 400kV Line bays and **4 nos** safety grounding switches for 400/220kV transformer bays and bus reactor bays. However, in GIS bay description as per clause 2.6.12.1 of Volume-II, only **two** for Line and **three** numbers of safety grounding switches are mentioned for transformer & reactor bays respectively. As both above statements are contradicting each other, please confirm whether bidder need to provide GIS module as per module description or as per SLD.	As per Description in Chapter 2 of Vol II	
32	Chapter 10, Technical specification for Isolators	Horizontal center break type isolator is mentioned for 400kV and 220kV voltage level.	However, In BPS, SLD & Electrical Layout Plan - Dwg No. NAC/AEGCL/Sonapur/EL-004 ,double break isolator is mentioned for all voltage levels. As requirements are contradicting, We request AEGCL to confirm the actual requirement.	As per BoQ, i.e. Double Break Isolator	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
33	CHAPTER 19: TECHNICAL SPECIFICATION OF POWER LINE CARRIER COMMUNICATION EQUIPMENTS WITH LINE TRAP, 48 V DC PLCC BATTERY, CHARGER	As referred to specification clause No.19.5.III, "The clamp shall be suitable for 4" IPS AL TUBE and TWIN/QUAD ACSR Moose Conductor".	As per Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004), Section: A-A, 4.5" IPS AL TUBE is mentioned at wave trap termination. As the requirement as per referred clause is contradicting with Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004), Kindly confirm requirement of line item of BoQ-1,Sl No. 2.08	As per BoQ	
34	Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004) SHT 1 of 1 (R6)		As per referred electrical layout, section: C-C is not matching with section: C-C drawing of Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004) SHT 2 of 2(R5). Please confirm the gantry requirement at transformer LV end and accordingly update the Electrical Layout Plan & section Drawing.	As per Layout drawing. The Section drawing will be updated.	
35	Cable trench layout plan & Sections drawing (Drawing no NAC/AEGCL/Sonapur/Trench-006) SHT 1 of 2(R7)		As per referred layout, outgoing connection from power transformer to GIS is shown with **cable** however as per Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004) SHT 1 of 1 (R6) same is shown as **Overhead conductor**. If cable is required, please add suitable line items for cable & cable terminations.	As per Layout drawing.	
36	Cable trench layout plan & Sections drawing (Drawing no NAC/AEGCL/Sonapur/Trench-006) SHT 1 of 2(R7)		With reference to above query, kindly provide below details of cable- 1.Cable specification 2.Cable size 3.No of runs per phase spec Kindly specify cable laying. Whether any trench requirement is there or not.	As per BoQ. Cable Connectivity is envisaged for the following: 1) 220kV XLPE D/C Cable Connectivity with new and Old 220kV GIS (1 run per phase + 1 spare for each circuit of 1600sqmm cable). 2) Cable Connectivity for Station transformer from Tertiary of 500MVA Transformer. 3) 33kV Outgoing feeders as per site condition.	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
37	Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004) SHT 1 of 1 (R6)		The referred electrical layout plan & section drawing is not matching with Cable trench layout plan & Sections drawing (Drawing no NAC/AEGCL/Sonapur/cTrench-006) SHT 1 of 2(R7). Client is requested confirm which layout need to preferred for design consideration.	Electrical Layout Plan shall be considered.	
38	Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004) SHT 1 of 1 (R6)		In continuation with above query, the location of CRB in Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004) SHT 1 of 1 (R6) is not matching with Cable trench layout plan & Sections drawing (Drawing no NAC/AEGCL/Sonapur/Trench-006) SHT 1 of 2(R7). Please confirm the requirement of standalone CRB as shown in cable trench layout & if required, location of CRB and specify dimensions and minimum room requirements to be considered for control room building design.	Electrical Layout Plan shall be considered.	
39	CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.11. A.	220kV GIS Bays- 2 future line bays are under 220kV GIS bay work.	As per Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004), space available for future at **switchyard** is for **single** bay. Please confirm the requirement and update the electrical layout drawing.	As per Chapter 2 of Vol II	
40	Price schedule, BoQ-1 Supply for sub Sonapur, Sl No. 7 - Bay Marshalling Kiosk along with support structures, foundation nuts and bolts and all other accessories		As referred to Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004), Location of 400kV & 220kV Bay Marshalling Kiosk is not given. Also, as per line item of BPS-Civil works BoQ-7 Sl No.5,"Buildings", line items for 400kV & 220kV Bay Marshalling Kiosk is not under the scope of the civil work. Kindly confirm the actual requirement, if required add a suitable line item for same and update the electrical layout accordingly.	As per BoQ	
41	Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004)		As per referred Electrical layout plan, Kindly confirm following points : 1. We understand that the all 400kV,220kV 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	1) Confirmed 2) will be decided during detail engineering 3) Confirmed	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
			clearance as per specification. 3. Shown LM locations and number are tentative only. Same shall be as per lightning calculations.		
42	Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.3	Scope of supply & Works: Survey, Erection, testing at site (SAT), Includes installation of HT cables between the Transformers and 33kV panels, switchgears, commissioning of GIS with all related civil works and earthing works as per this tender specification and Bill of quantities.	However, under present scope of Design, supply erection and commissioning work, no detailed scope of work w.r.t referred clause is specified. Please check and issue suitable amendment.	As per revised BOQ.	
43	Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004)		Please specify the location of DG set in referred layout.	During Detail Engineering	
44	Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.11.F Dismantling/shifting	The Complete Erection, Testing and Commissioning of the Line Differential Panels including establishment of the communication link for the relays, SAS Integration with the existing system at the remote end Sub Stations, Dismantling/shifting of existing panels and any associated Civil and electrical works at the Remote end stations of Byrnihat (MeECL), Karbi Langpi (APGCL) and Existing 220kV Sonapur GIS (AEGCL) shall be under the scope of the successful Bidder.	As per referred clause, Dismantling/shifting of existing panels is under the present scope. However, as per BPS, supply sub Sonapur, any line item for **dismantling/shifting** of existing panels and any associated Civil and electrical works at the Remote end stations is not given. Kindly check and issue suitable amendment.	Please refer revised BOQ	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
45	CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.12.1 H	400kV GIS Building size shall be such that, all the present and future modules can be installed with additional space for two numbers of extension modules and three numbers of maintenance bays with additional free space.	As per referred clause, we understand bidder need to consider following bays for 400kV GIS Building design keeping all electrical clearance requirement as per specification.- 1. Present bays 2. Future bays(6 Nos) 3. Space for extension module (2Nos) 4. Maintenance bay**(1no)** We are not considering any space for additional 3 modules as per note in 400kV GIS Building layout(Drawing no NAC/AEGCL/Sonapur/400GIS/GA-008.). we presume it is already considered in future bays. Please confirm.	Building Size shall be as per the Layout Drawing	
46	CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.12.1 H	220kV GIS Building size shall be such that, all the present and future modules can be installed with additional space for three numbers of extension modules and three numbers of maintenance bays with additional free space.	As per referred clause, we understand bidder need to consider following bays for 220kV GIS Building design keeping all electrical clearance requirement as per specification.- 1. Present bays 2. Future bays(2 Nos) 3. Space for extension module (3Nos) 4. Maintenance bay**(1no)** Please confirm.	Building Size shall be as per the Layout Drawing	
47	Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004)		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. Incase any increase in given building size during detail engineering, suitable amendment shall be provided.	1) Minimum Building Size shall be as per the Layout drawing. 2) For increase in Building Size, no price will be borne by AEGCL and shall be the responsibility of the EPC contractor.	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
48	220kV GIS building layout. Dwg No.NAC/AEGCL/Sonapur/ 220GIS/GA-009		The refered 220kV GIS floor plan is not matching with Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004). Please check & update 220kV GIS floor plan as per given Electrical Layout Plan & section drawing. Also, Dimensions of the proposed 220kV GIS building is not mentioned in the referred layout. Please check and provide the dimensions of layouts for design consideration.	Corrected drawing has been uploaded.	
49	220kV GIS building layout. Dwg No.NAC/AEGCL/Sonapur/ 220GIS/GA-009		The referred 400kV GIS floor plan is not matching with Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004). Please check & update 400kV GIS floor plan as per given Electrical Layout Plan & section drawing.	Corrected drawing has been uploaded.	
50	400kV GIS building layout. Dwg No.NAC/AEGCL/Sonapur/ 400GIS/GA-008		Dimensions of 400kV gas buildings in overall layout (Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004)) is not matching with the building dimensions given in the 400kV gis building layout. Please confirm which layout need to be	The Layout drawing shall be followed.	
51	220kV GIS building cum control room building floor plan (Drawing no NAC/AEGCL/Sonapur/220 GIS/**ARCH**-102)		Client is requested to confirm whether bidder need to consider referred drawing or 220kV GIS building layout. Dwg No.NAC/AEGCL/Sonapur/220GIS/GA-009 for design consideration.	Design for GIS building shall be done during detail engineering.	
52	400kV GIS building floor plans, elevation & sections (Drawing no NAC/AEGCL/Sonapur/220 GIS/**ARCH**-102)		Client is requested to confirm whether bidder need to consider referred drawing or 400kV GIS building layout. Dwg No.NAC/AEGCL/Sonapur/400GIS/GA-008 for design consideration.	Design for GIS building 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
53	Control Room cum Admin building layout plans & Elevation Guard Room/ security booth floor plan & elevations(NAC/AEGCL/SONAPUR/GR/ARCH-106 & Store building architectural floor plans		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. Incase any increase in given building size during detail engineering, suitable amendment shall be provided.	1) Minimum Building Size shall be as per the Layout drawing. 2) For increase in Building Size, no price will be borne by AEGCL and shall be the responsibility of the EPC contractor.	
54	CHAPTER: 5 LAND DEVELOPMENT AND ASSOCIATED CIVIL WORKS Page 74		As per referred specification, cl.no- 5.3 d) it is mentioned as following buildings shall be in scope of bidder a) **400 KV GIS Building** b) **220 KV GIS Building** c) 33kV Switchgear & Control Room building d) Kiosk Building e) Fire fighting pump house Building & Fire water Tank f) R.E Residence g) Transit Camp h) Officers Hostel i) Staff hostel j) Security Barrack k) **Security Booth** l) **Open Store Shed** m) **Store Building** However,for below mentioned buildings, there is no line item given in civil BOQ and also not shown in the layout 04-ELECTRICAL PLAN LAYOUT_SONAPUR-Model 07.12.2023. a) 33kV Switchgear building b) Kiosk Building c) R.E Residence d) Transit Camp e) Officers Hostel f) Staff hostel g) Security Barrack h) Fire fighting pump house Building & Fire water Tank	Please refer addendum.	Table 2(Vol-II), Sl No. 13

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
			Please check and confirm whether same need to be considered. if required please provide sperate line items and provide the revised layout		
55	CHAPTER: 5 LAND DEVELOPMENT AND ASSOCIATED CIVIL WORKS Page 74		In continuation to above query, if 33kV panels need to supply in this package. Please provide the following a) Separate line item for 33kV switchgear b) 33kV SLD along with incoming and outgoing feeder details c) 33kV switchgear specification d) Type of connections for incoming and outgoing feeders of switchgears any cables need to be considered e) Type of protections to be considered in the relays of 33kV switchgears	As per BoQ	
56	Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.11.F SAS Integration with the existing system at the remote end Sub Stations	The Complete Erection, Testing and Commissioning of the Line Differential Panels including establishment of the communication link for the relays, SAS Integration with the existing system at the remote end Sub Stations, Dismantling/shifting of existing panels and any associated Civil and electrical works at the Remote end stations of Byrnihat (MeECL), Karbi Langpi (APGCL) and Existing 220kV Sonapur GIS (AEGCL) shall be under the scope of the successful Bidder.	As per referred clause, SAS Integration with the existing system at the remote end Sub Stations is under the present scope. However, as per BPS-supply sub Sonapur, any line item for **SAS Integration** with the existing system at the remote end Sub Stations is not given. Kindly check and issue suitable amendment.	Please refer addendum	Table 2(Vol-II), Sl No. 5

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
57	Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.11.F SAS Integration with the existing system at the remote end Sub Stations	The Complete Erection, Testing and Commissioning of the Line Differential Panels including establishment of the communication link for the relays, SAS Integration with the existing system at the remote end Sub Stations, Dismantling/shifting of existing panels and any associated Civil and electrical works at the Remote end stations of Byrnihat (MeECL), Karbi Langpi (APGCL) and Existing 220kV Sonapur GIS (AEGCL) shall be under the scope of the successful Bidder.	1.Please furnish the following details w.r.t existing SAS at Silchar (PGCIL)SS, Byrnihat (MeECL), Existing 220kV Sonapur GIS (AEGCL), Sarusajai SS, Karbi Langpi (APGCL) a) Make b) Model number c) Number of spare IO cards available d) Communication protocol (IEC 61850 or IEC 60870-5-101 or IEC 60870-5-104) of existing relays with substation automation system e) SAS/RTU Architecture drawing 2. We understand that we are not envisaging any integration with SLDC/RLDC stations- Please confirm.	During Detail Engineering	
58	Chapter-15,Technical specification of Substation Automation system,Annexure-I, Notes-3)	Required Inverter of Numeric make, 3 KVA capacity shall be provided by the bidder.	As referred to BoQ Sl no.10.04, SAS Inverter of 5kVA is mentioned. Client is requested to check and confirm the actual requirement.	As per BoQ	
59	CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.11.E Integration with the existing FOTE system	Optical Communication Link shall be established for the following: 400kV Silchar- Sonapur (new) Transmission Line and 400kV Sonapur (new)-Byrnihat Transmission Line with Erection, Testing and Commissioning of FOTE system including integration with the existing FOTE system at Silchar (PGCIL), Byrnihat (MeECL) and Sonapur (new) (AEGCL) end.	Please confirm below points- 1.We understand FOTE shall be only supplied for Sonapur (new) (AEGCL) end i.e. **2 Sets.** However, as per BPS BoQ1-Supply of sub Sonapur, Sl No. 20.011, quantity mentioned is **3 sets.** Please confirm actual requirement. 2.We are not envisaging any supply of FOTE for 220kV lines. Please confirm.	1) As per BoQ for all 3 sites 2) confirmed	
60	CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.11.E Integration with the existing FOTE system	Optical Communication Link shall be established for the following: 400kV Silchar- Sonapur (new) Transmission Line and 400kV Sonapur (new)-Byrnihat Transmission Line with Erection, Testing and Commissioning of FOTE system including integration with the existing FOTE system at Silchar (PGCIL), Byrnihat (MeECL) and Sonapur (new) (AEGCL) end.	We understand that Supply of FOTE at Silchar (PGCIL), Byrnihat (MeECL) is not in present scope. Please confirm the actual requirement and include suitable line items in the BPS. If required please furnish the existing communication details at remote end substations (Silchar (PGCIL), Byrnihat (MeECL) a) Make	Supply of FOTE is included for the Remote End Sites also	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
			b) Model number c) Transmission capacity (STM-1/SM-4/STM-16) d) Number of spare teleprotection interface cards e) Number of spare data interface cards f) Number of speech interface cards g) Please provide Existing drawings h) Please specify the requirement of Digital protection coupler at remote end stations i) Please specify the requirement of Fiber distribution panel at remote end stations ?		
61	Price schedule, BOQ1-Supply for Sub Sonapur-Sl No. 20 - OPGW equipments equipment		In continuation to above query, we understand that the sufficient number of spare feeders are available in 48V DC distribution board in remote end to provide the 48V DC power supply to FOTE panels at remote end stations if required. Please confirm.	As per site visit of the EPC Contractor	
62	CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.11.E PLCC system	PLCC link shall be established for the following lines- 1) 400kV Silchar- Sonapur (new) Transmission Line and 400kV Sonapur (new)-Byrnihat Transmission Line with Erection, Testing and Commissioning of PLCC system at Silchar(PGCIL), Byrnihat (MeECL) and Sonapur (new) (AEGCL) end. 2)220 kV Karbi Langpi – Sonapur (new) D/C Transmission Line and 220 kV Sonapur (new) – Sarusajai D/C Transmission Line with Erection, Testing and Commissioning of PLCC system at Karbi Langpi (APGCL), Sonapur(new) (AEGCL) and Sarusajai (AEGCL) end	We understand that Supply of PLCC at Silchar (PGCIL), Byrnihat (MeECL),220 kV Karbi Langpi and Sarusajai D/C Transmission Line is not in present scope. Please confirm whether bidder understanding is correct.	It is included in the present scope	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
63	CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.11.E PLCC system	PLCC link shall be established for the following lines- 1) 400kV Silchar- Sonapur (new) Transmission Line and 400kV Sonapur (new)-Byrnihat Transmission Line with Erection, Testing and Commissioning of PLCC system at Silchar(PGCIL), Byrnihat (MeECL) and Sonapur (new) (AEGCL) end. 2)220 kV Karbi Langpi – Sonapur (new) D/C Transmission Line and 220 kV Sonapur (new) – Sarusajai D/C Transmission Line with Erection, Testing and Commissioning of PLCC system at Karbi Langpi (APGCL), Sonapur(new) (AEGCL) and Sarusajai (AEGCL) end	We are not envisaging any communication integration works at existing PLCC system at Silchar (PGCIL), Byrnihat (MeECL),220kV Karbi Langpi and Sarusajai S/S. If required, Please furnish the Make & Model of existing PLCC Please include suitable line items in the BPS.	It is included in the present scope	
64	Price schedule, BOQ1-Supply for Sub Sonapur - Sl No. 18.02 - Power line carrier communication equipment for 400kV	Digital Carrier Equipment Panel (Twin channel and should support transmission band for line length 240 km) for 400kV	In the referred line item 8Nos. 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 **not covered** in the present scope .Hence, quantity for the same shall be **4 Nos**. Please check and issue suitable amendment for the same.	Considered for Remote End too	
65	Price schedule, BOQ1-Supply for Sub Sonapur - Sl No. 18.03 - Power line carrier communication equipment for 220kV	Digital Carrier Equipment Panel (Twin channel and should support transmission band for line length 150 km) 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 not covered in the present scope .	Considered for Remote End too	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
66	Price schedule, BOQ1-Supply for Sub Sonapur - Sl No. 21 - Power line carrier communication equipment		We understand that the sufficient number of spare feeders are available in 48V DC distribution board in remote end to provide the 48V DC power supply to PLCC panels at remote end stations if required. Please confirm.	As per site visit of the EPC Contractor	
67	Busbar Protection details at Silchar (PGCIL) SS and Byrnihat (MeECL) SS end		Please furnish the below details of existing SS w.r.t existing Busbar Protection at 400kV Silchar (PGCIL) SS and 400kV Byrnihat (MeECL) SS a) Make & Model number b) Centralized or Decentralized type? c) If decentralized type, whether Bay units are already available for the bays proposed under this package.	As per site visit of the EPC Contractor	
68	Busbar Protection details at Karbi Langpi SS, Sonapur old SS, Sarusajai SS end		Please furnish the below details of existing SS w.r.t existing Busbar Protection at 220kV Karbi Langpi SS, 220kV Sonapur old SS and 220kV Sarusajai SS end a) Make & Model number b) Centralized or Decentralized type? c) If decentralized type, whether Bay units are already available for the bays proposed under this package.	As per site visit of the EPC Contractor	
69	Line distances		Please furnish the remote end details & line lengths for the proposed 400kV and 220kV lines in order to choose the appropriate protection & communication interfaces. a) Proposed 400kV line from new Sonapur ss to 400kV Silchar ss b) Proposed 400kV line from new Sonapur ss to 400kV Byrnihat ss c) Proposed 220kv line from new Sonapur ss to Karbi Langpi ss d) Proposed 220kV line from new Sonapur ss to Sarusajai D/C e) Proposed 220kV cable from new Sonapur ss to old 220kV Sonapur GIS	a) Approx 230 kms b) Approx 25 kms c) Approx 80 kms d) Approx 32kms e) Approx 1 km	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
70	Price schedule, BOQ1-Supply for Sub Sonapur - Sl No. 9.012		As per referred BOQ, we understand that line differential relay along with line protection panel shall be supplied for proposed **Sonapur new substation and Byrnihat substation only**. We are not considering any differential relays and line protection panels at Silchar substation end. please confirm whether bidder understanding is correct.	Confirmed	
71	Price schedule, BOQ1-Supply for Sub Sonapur - Sl No. 9.022		As per referred BOQ, we understand that line differential relay along with CRP shall be supplied for proposed **Sonapur new substation & Sonapur old substation end.** Also, for proposed **Sonapur new substation & Karbi Langpi (APGCL)** substation end only. We are not considering any differential relays and line protection panels at Sarusajai end. please confirm whether bidder understanding is correct.	Confirmed	
72	Protection relays at remote end		We propose the Main protection as Distance protection for 400kV and 220kV lines. a) If differential protection need to be considered, please clarify the scope of remote end differential relays (supplied as loose)? b) If remote end differential relays are already available, please confirm the make & model number.	As per BoQ	
73	CHAPTER 2: INFORMATION TO BIDDERS (ITB), CHAPTER 9: TECHNICAL SPECIFICATIONS OF XLPE INSULATED COPPER CONTROL AND POWER CABLE	As per referred chapter, it is mentioned as GI round wire armoured cables.	However as per IS 7098-Part 1, type of armour shall be clause no-13.2, where the calculated diameter below armouring does not exceed 13mm, the armour shall consist of galvanized round steel wires. where the calculated diameter below armouring greater than 13mm, the armour shall consist of either galvanized round steel wires or galvanized steel strips. We presume that bidder need to supply cables shall confirm to IS 7098-Part 1 and armour shall consist of either galvanized round steel wires or galvanized steel strips as per the requirements. Please confirm.	As per BID	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
74	Spare cable quantity		Please confirm the number of spare cables to be considered from the Sonapur old substation to Sonapur new substation for 220KV lines. We understand that bidder need to consider common spare cable for both circuits of 220kV lines from Sonapur old substation to Sonapur new substation. Please confirm	Separate Spare Cable for each Circuit shall be considered	
75	Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.3	Scope of supply & Works: Survey, Erection, testing at site (SAT), Includes installation of HT cables between the Transformers and 33kV panels, switchgears, commissioning of GIS with all related civil works and earthing works as per this tender specification and Bill of quantities.	With reference to above mentioned query, please confirm the requirement of BPS line item, Sl No. 21.03 & 21.04 (33kV, 66kV and 220kV Copper XLPE Cable and Termination Kit as per specification) required for installation of HT cables between the Transformers and 33kV panels.	Please refer addendum	Table 2(Vol-II), Sl No. 7
76	Price schedule, BOQ1-Supply for Sub Sonapur - Sl No. 21.02 - 66kV Power cable termination kit		As referred to Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004) SHT 1 of 1 (R6), no.of 66kv cable terminations quantity in referred line item is not matching. Please check & update quantity of cable terminations as per actual requirement.	As per BoQ	
77	EHV Cable bonding.		Please confirm whether Single-point Bonding or Cross bonding shall be considered for EHV cable.	During Detail Engineering	
78	Price schedule, BOQ1-Supply for Sub Sonapur - Sl No. 23 & 24 - Power cable		We understand that 33kV,66kV and 220KV cables shall be laid directly buried. Please confirm.	1) For 33kV - Cable trench 2) For 66kV- Direct Buried 3) For 220kV - Direct Buried/Cable Trench as per Site Condition	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
79	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	
80	CHAPTER 17: TECHNICAL SPECIFICATION OF TRANSFORMER (UPTO 400kV CLASS) Cl no.17.13.10.3 Optical sensors & temperature measuring unit	Optical temperature sensors shall be fitted on each Transformer unit.	However, as per BPS, BoQ1, Sl No.14, requirement of FOTS is not mentioned. Client is requested to confirm the requirement & add suitable line item for same.	As per BOQ1, SL. No 14.02	
81	CHAPTER 21: TECHNICAL SPECIFICATION FOR SHUNT REACTOR (UPTO 400kV), NEUTRAL GROUNDING REACTOR AND SURGE ARRESTER, Cl no. 21.1	Each reactor shall be supplied with (i) One number or Oil Storage tank, (ii) 3 nos. of oil sampling bottles, (iii) On line DGA, (iv) Fiber optic sensors, (v) Nitrogen Injection System for Protection against the Fire & Explosion etc."	However, as per BoQ1, Sl no.15 & 16, same is not mentioned. Client is requested to add suitable line item for same.	For Supply, i) To be quoted in BoQ 14 ii), iii), iv) to be quoted in sl.No 15.01 and 16.01 of BoQ 1 v) To be quoted in sl.No 29.03 of BoQ 1	
82	Price schedule, BOQ1- Supply for Sub Sonapur, Sl No. 13 - Supply of Testing and Maintenance equipment for GIS as specified (each for 220kV & 400kV GIS)	Online Partial Discharge Monitoring Unit	We understand that all the items mentioned under referred line item shall be supplied commonly for Sonapur S/S and not for individual voltage levels. For example, line-item number 13.02, 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.	As per BoQ	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
83	Price schedule, BoQ1 - Supply of Sub Sonapur - Sl No. 3.02, 440V MCCB with power receiving panel for Station service transformer	440V MCCB with Power receiving Panel as per scheme requirement (with structure, if applicable) for 1000KVA 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	
84	Price schedule, BOQ1- Supply for Sub Sonapur - Sl No. 11.11 - EOT crane for GIS building		As per 400kV GIS building layout (Drawing no. NAC/AEGCL/SONAPUR/400 GIS/GA-008, 12T capacity of EOT crane for 400kV GIS Hall is shown. However, as per referred line item, supply of 10T EOT crane is mentioned. Kindly confirm the actual requirement.	As per BoQ	
85	400kV GIS building layout (Drawing no.NAC/AEGCL/SONAPUR/400 GIS/GA-008)		As per 400kV GIS building layout, mentioned minimum hook height of crane is 9m. However, as per CHAPTER 16: GIS EQUIPMENTS, Cl No.16.5.1.25.7, minimum height of crane shall be 10.5m. Kindly confirm the actual requirement.	As per BID	
86	Price schedule, BOQ1- Supply for Sub Sonapur - Sl No. 12.07 -EOT crane for GIS building		As per 220kV GIS building layout (Drawing no. NAC/AEGCL/SONAPUR/220 GIS/GA-009 Rev3, 10T capacity of EOT crane for 220kV GIS Hall is shown. However, as per referred line item, supply of 7.5T EOT crane is mentioned. Kindly confirm the actual requirement.	As per BoQ	
87	Vol.II, Chapter 35: Earthing and DSLP, CL No.1.1 Table A	As per referred clause, For Earthling of indoor LT panels, Control panels and outdoor marshalling boxes, Junction boxes & Lighting Panels etc., 50x6 mm G.S. flat is mentioned.	However as per BPS, sr. no. 25.04, Earthing Conductor: 50X10Mm GS(HDG) Flat is mentioned for Riser for Console Box, Lt Panels, DC Panels, Marshalling Boxes, Cable Trenches Etc.). Please confirm the requirement.	As per BoQ	
88	Chapter- 2: Information to Bidders (ITB), II. B	The referred clause states that, "The capacity of Battery & Battery charger shall be worked out by bidder for complete 400/220kV substation (including future bays). However, capacity of battery and charger should not be less than as specified in the BPS".	However, minimum battery & charger capacity is not mentioned in BPS. Client is requested to check & specify the capacity requirement.	Shall be as per Sizing Calculation	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
89	Price schedule, BOQ1- Supply for Sub Sonapur - Sl No. 17.02 - Battery charger	As per Chapter 18 of technical specification no.18.2, "D.C. Power Supply shall comprise a set of Battery (220V) of desired capacity, a Float charger and a Float cum Boost Battery Charger (minimum 60A) in parallel operation."	Whereas, As referred to line item, quantity of 220V battery charger is given only for Dual float cum boost charger which is 4 sets. With reference to above clause, Kindly confirm the below points- 1. Please confirm actual requirement for type of the battery charger to be considered whether a. Float charger & Float cum boost charger OR b. Float cum boost charger and kindly specify number of each type of chargers per battery bank.	Total quantity of 220V chargers shall be 4 numbers (2 numbers of FCBC shall be considered as 1 set)	
90	Price schedule, BOQ1- Supply for Sub Sonapur - Sl No. 17.05- Battery charger		Whereas, As referred to line item, quantity of 48V battery charger is given only for Dual float cum boost charger which is 4 sets. With reference to above clause, Kindly confirm the below points- 1. Please confirm actual requirement for type of the battery charger to be considered whether a. Float charger & Float cum boost charger OR b. Float cum boost charger and kindly specify number of each type of chargers per battery bank.	Total quantity of 48V chargers shall be 4 numbers (2 numbers of FCBC shall be considered as 1 set)	
91	Vol.II, CHAPTER 7: GENERAL TECHNICAL CLAUSES FOR DESIGN, Clause No. 7.17 -SUPPLY VOLTAGE		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
92	Vol.1, Section 3: Evaluation and Qualification Criteria, Clause No. 2.5a, Item No.2 - GIS		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 (p) XIHARI, China 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	
93	Vol.1, Section 3: Evaluation and Qualification Criteria, Clause No. 2.5a, Item No.2 - GIS	The testing Laboratory shall be accepted only if international accreditation certificate is furnished. In case the type test reports are older than 15 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 supply. 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.	As per CEA Guidelines	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
94	Vol.1, Section 3: Evaluation and Qualification Criteria, Clause No. 2.5a, Item No.2 - GIS		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 GIS shall be submitted on same rating	
95	Vol.II, CHAPTER 4: PROJECT IMPLEMENTATION, 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.	
96	Vol.II, CHAPTER 7: General technical clauses for Design, Clause No. 7.21.2 & CHAPTER 15 : GIS Equipments, Clause No. 16.6		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.	
97	Vol.II, CHAPTER 7: GENERAL TECHNICAL CLAUSES FOR DESIGN, 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 for type tests for major equipments of Power sector".	Shall be as per latest CEA guidelines	
98	Vol.II, CHAPTER 7: GENERAL TECHNICAL CLAUSES FOR DESIGN, Clause No.7.21.2. Mandatory Type Test for GIS Equipment's	As per referred clause, it is mentioned as "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	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
99	Vol II, Chapter 16, Cl. 16.13, Site test	The following site tests are indicated in the referred clause: a) Tests as per IEEE C37.122.1 clause 4.10.5 b) Demonstration of operational compatibility with SCADA	Please note that Test as per IEEE C37.122.1 cl. 4.10.5 is VFTO for GIS. Site testing is not possible for VFTOs. Operational compatibility with SCADA may be possible only through Optical CTs which are not in the scope of this contract. Hence, we request AEGCL to check and amend this clause suitably.	As per bid	
100	Vol.II, CHAPTER 7: GENERAL TECHNICAL CLAUSES FOR DESIGN, Clause No.7.21.2. Mandatory Type Test for GIS Equipment's	As per referred clause, Sl No. 18, Tests on solid dielectric components (operating rods, spacers, etc.) is mentioned in the mandatory type test of GIS.	However, 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	
101	CHAPTER 16: GIS EQUIPMENTS, clause 16.4.3,	As per referred clause, 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.	As per bid	
102	CHAPTER 16: GIS EQUIPMENTS, clause 16.4.5,	As per referred clause, 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	Continuous bus lengths without gas segregation shall not be acceptable for any voltage level. The bus bars shall be segregated after each bay module (line/transformer/tie/bus coupler etc.)	
103	CHAPTER 16: GIS EQUIPMENTS, clause 16.4.5,	As per referred clause, 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. Output shall be 4-20mA	
104	CHAPTER 16: GIS EQUIPMENTS, clause 16.4.8,	As per referred clause, 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
105	CHAPTER 16: GIS EQUIPMENTS, clause 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	
106	CHAPTER 16: GIS EQUIPMENTS, clause 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.	
107	CHAPTER 16: GIS EQUIPMENTS, clause 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.	
108	CHAPTER 16: GIS EQUIPMENTS, clause 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.	
109	CHAPTER 16: GIS EQUIPMENTS, clause 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.	For Future Extension, The Future Extension Module with Isolating Link shall be provided to support Extension of any Bus Configuration of Other GIS OEM.	
110	Vol II, Chapter 10, sr.no 14, & Chapter 16, Cl. 16.4 Power frequency withstand voltage		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	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
111	Vol II, Chapter 14, CL. 14.5.3	As per the referred clause,CRP panels shall be of the following approximate dimensions: I. Height: 2250mm + 15mm ant 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 dimensions as : Height: 2200mm + 15mm anti-vibration pad + 100 mm (base). However the total height of 2315 will remain same as per spec. Pls confirm	Accepted	
112	Vol II, Chapter 14, Cl. 14.4.2, Interoperability test for CRP	Referred clause indicates "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	
113	Vol II, Chapter 14, Cl. 14.15.1	As per the referred clause, 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	
114	Vol II, Chapter 14, Cl.-14.28/ Distance Protection	As per the referred clause, 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	
115	Vol II, Chapter 14, Cl.-14.16.6.b/ Auto Reclose Function	As per the referred clause, "NUMERICAL AUTO RECLOSING FUNCTION (where specified) shall be an in built feature of Main-I and Main-II protection relay".	We propose to provide auto reclose function as part of either BCU or Main protection relays. Please confirm.	As per bid	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
116	9.14.2 General Specification of Numerical Relays : Integrated Numerical Transformer Differential Protection as Main –I & Main-II		We understand that 2 Nos, Transformer Protection Relay in Main I & Main II configuration is to be proposed with inbuilt overflux, high impedance REF & backup non directional protection functions, please confirm if the bidder's understanding is in line with the project requirement or not.	As per bid	
117	Vol II, Chapter 14, Cl.-14.24 BAY CONTROL UNIT (BCU)	As per the referred clause, 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 power failure in one source, relay shall get supply from other source through auto change-over. Any of the supply failure shall generate necessary alarm to local SCADA. Pls accept the same.	As per bid	
118	Vol II, Chapter 14, Cl-14.28 PROTECTION SCHEME FOR PANELS/132kV	As per the referred clause, 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. Please confirm/accept.	As per bid	
119	Vol II, Chapter 14, Cl-14.28 PROTECTION SCHEME FOR PANELS/33kV	As per the referred clause, 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.	As per bid	
120	Vol.II, CHAPTER 14: TECHNICAL SPECIFICATION FOR CONTROL & RELAY PANEL, 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	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
121	Vol II, Chapter 15, Cl. 15.1, 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	
122	Vol II, Chapter 17, Cl. 17.13.3.2, Thermosyphon filter system		Referred clause indicates thermosyphon filter system for filtration. As thermosyphon filter is an old technology, we request AEGCL to use any advanced methods such as online Oil drying system which is already in the scope of this package. Hence, the requirement of thermosyphon filter can be Deleted. Please confirm.	As per bid	
123	Vol.II, CHAPTER 17,Clause No. 17.4.0. SPECIFIC REQUIREMENT	As per the referred clause, 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. Type Test Reports older than five (5) years on the date of Technical bid opening shall not be accepted.	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.	As per bid	
124	Vol.II, CHAPTER 17, Cl. 17.4.0 (ii), Dynamic Effect of Short Circuit: For 400 kV Class Transformer	As per referred clause, it is mentioned as "Bidder / Manufacturer should have successfully carried out Dynamic Short Circuit test on 315MVA or above rating 400/220/33kV or 400/230/33kV, 3- Phase Auto transformer as on the originally scheduled date of bid opening and shall enclose the relevant Test Report/certificate along with bid. In case bidder/manufacturer has not successfully tested 315MVA or above rating 400/220/33kV or 400/230/33kV, 3-Phase Auto 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	Establishing similarities as per IEC 60076-5,for 500MVA transformer w.r.t 315 MVA short circuit tested transformer is not possible. However, for bid qualification short circuit test report of 315MVA shall be submitted. In order to verify the dynamic effects of short circuits for the offered 500MVA transformer, we request client to accept detailed calculations by checking 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.	As per bid	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
		respect to short circuit tested transformer. Further, design review of offered 400kV Class Auto transformer shall be carried out based on the design of short circuit tested 315MVA or above rating 400/220/33kVor 400/230/33kV, 3-Phase Auto transformer.."			
125	Price schedule, BOQ1-Supply for Sub Sonapur - Sl No.31.02- 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.	Required for entire substation area	
126	Price schedule, BOQ1-Supply for Sub Sonapur - Sl No.33- 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.	Lightning protection shall be provided for the entire switchyard area (present + future)	
127	Approach road lighting		Please clarify whether approach road lighting (outside the plot boundary) is in the scope of this package. If required, please add a separate line item in the BPS.	Not in the scope of the bidder	
128	Illumination		Kindly confirm the following: 1. We are not considering any DC lighting for the proposed package. 2. We are not envisaging any emergency lighting in FFPH building including reservoir, Security booth, store building, open store shed and all other Buildings except in 400kV GIS, 220V GIS and control buildings. Further, Please furnish the AC & DC power distribution SLD inclusive of substation and residential feeder requirement as the same is not available in the tender documents.	1) Required for Emergency lighting 2) Also required for FFPH, Open Store and Store Building in addition to the GIS Halls and CRB.	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
129	Drawings		Kindly provide the following drawings/Inputs for the proposed Substation. 1. LT AC & DC SLD. 2. Type of cables and cable sizes to be followed along with specification.	1) During Detail Engineering 2) As per BID and BoQ	
130	NMS integration Vol.II, CHAPTER 29: SPECIFICATIONS FOR COMMUNICATION EQUIPMENT FOR ESTABLISHMENT OF FIBRE OPTIC COMMUNICATION SYSTEM Clause No. 29.1 Scope and General Requirements	The Tenderer is supposed to make necessary survey for integration of the SDH Equipment with the existing NMS at SLDC, Kahilipara. For this if any traffic routing to SLDC is required through other Utilities; AEGCL will arrange the same. However, during interfacing with the existing telecom equipment if any hardware/software is required (at SLDC or Remote end), the Bidder has to offer the same with no cost implication to AEGCL.	As per referred clause, Integration with existing NMS at SLDC is under present scope. Please clarify the existing **make and model no**. of NMS for following substations- 1.Silchar (PGCIL) 2.Byrnihat (MeECL) 3.220kV Karbi Langpi 4. Sarusajai GSS 5. SLDC	No NMS integration under the scope of this bidder	
131	CDCS integration		We understand that integration with existing CDCS at SLDC in not under present scope. Incase same needs to be considered under present scope, client is requested to provide CDCS server details (make **& Model no. of existing CDCS)** and requested to issue suitable amendment for the same.	Integration with existing CDCS at SLDC is under the scope of the successful bidder. CDCS SAMAST METERING Make: Server (HP); Model: HP ProLiant DL 360 R440; Storage server: DELL EMC2. Price for Integration of CDCS at SLDC shall be quoted in Sl. No. 10.160 of BoQ5 sheet.	
132	Chapter 7: General technical clauses for design : Clause 7.12		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 type tested design of GIS OEM	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
133	Technical specification of SAMAST Meter Technical specification of CRP: 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	
134	CHAPTER 15: SUB STATION AUTOMATION SYSTEM, Sl.No.8: Communication.		As referred to technical specification, SCADA Integration work at existing SLDC is not clear. Bidder's scope is limited only up to the substation gateway for SCADA integration work. We are not envisaging any modification of SCADA software / hardware at existing stations/SLDC/RLDC. Any modification work at the existing SLDC will be in the scope of AEGCL & shall be carried out through respective SCADA OEM. However, Bidder shall ensure seamless data communication through PLCC/Gateway to SLDC. Please confirm.	No hardware/software upgradation at SLDC end is required under the bidder's scope.	
135	Order of precedence		Technical requirements for the tender are specified in 3 broad categories - 1. Bid Price Schedule 2.Technical specifications 3. Tender drawings like SLD & Layout. In case of contradictions among these documents, please confirm the order of precedence to be followed, i.e., which one will prevail over others.	No precedence	
136	Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004)		Bill of quantities as mentioned in the referred layout are not matching with the exact requirements. We presume that bidder need to consider quantities as per tender BOQ only. Please confirm.	As per BoQ	
137	Price schedule, BOQ1-Supply for Sub Sonapur - Sl No. 21.01,21.03,21.05		We are requesting AEGCL to provide referred line items in unit rates instead of lot as there is no clarity regarding scope of cables	As per BoQ	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
138	Public addressing system, CCTV		We are not considering any public addressing system & VMS augmentation works. Please confirm.	As per BoQ	
139	Switchyard Illumination		We understand that lighting for extension bays only under present scope of work. Please confirm.	For the entire switchyard	
140	Earthing & earth mat extension		We understand that earthing for extension bays only under present scope of work. Please confirm.	For the entire substation area	
141	DSLP		We understand that lightning for extension bays only under present scope of work. Please confirm.	For the entire substation area	
142	General-Sonapur old and Sonapur new substation		We presume that Earthing, DSLP, Lighting, Cable trench, other associated works are required to be executed only for the present scope of works and the same are not required for future bays. Please confirm.	For the entire substation area	
143	Repeater Station		We do not envisage any repeater stations in the scope of this package. If required, please add a separate line item in the BPS for considering the requirements for telecom shelter system, including its sub-systems, Air-conditioning system, DG Set, PIU & 48V DC Power Supply	Repeater Station not required	
144	Order of precedence		In case of contradiction between PKG_H_Vol.II, Tender drawings & BOQ, we presume the requirements as per BoQ shall be followed. Please confirm.	As per BOQ	
145	General		Please confirm whether both Integrated or Standalone LCC are acceptable based on the manufacturer standard for the Proposed 400kV & 220KV GIS.	Only Standalone LCC to be accepted	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
146	Remote end		As per section project, we presume that no work is envisaged at remote end (RLDC/SLDC/ NLDC/RTAMC/ NTAMC / Backup NTAMC) under the present scope. Please confirm whether bidder understanding is inline with specification requirement.	No hardware/software upgradation at SLDC end is required under the bidder's scope.	
147	Creepage distance		We presume that creepage distance shall be 25mm/kV for all equipment in SONAPUR old and Sonapur new substations. Please confirm whether bidder understanding is correct.	Not accepted. Shall be 31mm/kV	
148	Sonapur old and Sonapur new substation		We do not envisage any RTV coating in all substations for Outdoor equipment as the same is not mentioned in the section project. Please confirm. If RTV coating is required, please provide the requirement and specification for RTV coating	Please follow the updated BoQ.	
149	Sonapur old and Sonapur new substation		We are not considering any ground improvement works in all substations. Please confirm whether bidder understanding is correct.	**Proper compaction with proper soling shall be under bidder's scope.**	
150	Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.12.1, 400kV GIS,Cl no. b)	420kV, 63kA for 3 second, SF6 gas-insulated metal enclosed Line feeder bay module each set comprises- One (1) number 3-phase, 4000A, SF6 insulated circuit breaker complete with operating mechanism.	As per CHAPTER 3: DRAWINGS AND DOCUMENTS, 400kV GIS,Cl No.b), it is mentioned that - "420kV, 63kA for 3 second, SF6 gas-insulated metal enclosed Line feeder bay module each set comprises- One (1) number 3-phase, 4000A, SF6 insulated circuit breaker with **PIR** complete with operating mechanism." However, as per chapter 2 & 3, the requirement of PIR for line module is contradicting. Also as per BPS line item 11.01, PIR requirement is given for line bay module of silchar. Please confirm which clause bidder need to consider for module description. Also confirm whether bidder need to consider PIR	Chapter 3 Page No 50 to 57 Deleted	Table 2(Vol-II), Sl No. 8

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
			only for silchar line as per tender SLD		
151	Price schedule, BOQ1-Supply for Sub Sonapur, 400 kV GIS Equipment, Sl No. 11.02	3- Ø 400 kV, 4000 A, 63 kA-3 sec, metal enclosed SF6 Gas Insulated Switchgear-Line Bay Module **without CSD/PIR** as per technical specification	We understand that PIR is not considered for 400kV Byrnihat Line Bay. Please confirm whether bidder understanding is correct.	As per BID and BoQ	
152	Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.12.1, 400kV GIS,Cl no. C)	420kV, 63kA for 3 second, SF6 gas-insulated metal enclosed ICT bay module (For 400kV side of 400/220kV ICT) each set comprises-One (1) number 3-phase, 4000A, SF6 insulated circuit breaker with **CSD** complete with operating mechanism.	As per CHAPTER 3: DRAWINGS AND DOCUMENTS, 400kV GIS,Cl No.c), it is mentioned that - "420kV, 63kA for 3 second, SF6 gas-insulated metal enclosed ICT bay module(For 400kV side of 400/220kV ICT) each set comprises-One (1) number 3-phase, 4000A, SF6 insulated circuit breaker with **PIR** complete with operating mechanism.." However, as per chapter 2 & 3, the requirement of CSD and PIR for ICT bay module is contradicting. Also, as per BPS line item 11.04, requirement of SF6 insulated circuit breaker with **CSD** is mentioned. We are requesting AEGCL to confirm actual requirement of CSD & PIR for ICT bay module. We presume bidder need to provide CSD only for ICT bay module, PIR is not required for the same. Please confirm	Chapter 3 Page No 50 to 57 Deleted	Table 2(Vol-II), Sl No. 8
153	Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.12.1, 400kV GIS,Cl no. d)	420kV, 63kA for 3 second, SF6 gas-insulated metal enclosed Bus Reactor bay module each set comprises-One (1) number 3-phase, 4000A, SF6 insulated circuit breaker with **CSD**, complete with operating mechanism.	As per CHAPTER 3: DRAWINGS AND DOCUMENTS, 400kV GIS, Cl No.d), it is mentioned that - "420kV, 63kA for 3 second, SF6 gas-insulated metal enclosed Bus Reactor bay module each set comprises-One (1) number 3-phase, 4000A, SF6 insulated circuit breaker with **PIR**,	Chapter 3 Page No 50 to 57 Deleted	Table 2(Vol-II), Sl No. 8

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
			complete with operating mechanism." However, as per chapter 2 & 3, the requirement of CSD and PIR for bus reactor bay module is contradicting. Also, as per BPS line item 11.07, requirement of SF6 insulated circuit breaker with **CSD** is mentioned. we are requesting AEGCL to confirm actual requirement of CSD & PIR for Bus reactor bay module. We presume bidder need to provide CSD only for Bus reactor bay module, PIR is not required for the same. Please confirm		
154	Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.12.1, 400kV GIS,Cl no.e)	420kV, 63kA for 3 second, SF6 gas-insulated metal enclosed Tie bay module each set comprises-One (1) number 3-phase, 4000A, SF6 insulated circuit breaker with **CSD** & complete with operating mechanism.	As per CHAPTER 3: DRAWINGS AND DOCUMENTS, 400kV GIS, Cl No.e), it is mentioned that - "420kV, 63kA for 3 second, SF6 gas-insulated metal enclosed Tie baymodule each set comprises -One (1) number 3-phase, 4000A, SF6 insulated circuit breaker with **PIR** & complete with operating mechanism." However, as per chapter 2 & 3, the requirement of CSD and PIR for tie bay module is contradicting. Also, as per BPS line item 11.07, requirement of SF6 insulated circuit breaker with **PIR+CSD** is mentioned. We presume bidder need to consider only PIR for Tie bay module of 400kV Silchar & Byrnihat line bays as it is not connected to either of transformer or reactor bay. For reamining two diameters bidder need to consider only CSD as both bays are connected to transformer/reactor bays. Please confirm whether bidder understanding is correct	Chapter 3 Page No 50 to 57 Deleted	Table 2(Vol-II), Sl No. 8
155	CHAPTER 16: GIS EQUIPMENTS, Cl no.16.5.1.11.2	The CSD shall be provided in 400kV Circuit breakers for controlling transformers and reactors (ie for breakers of switchable line reactor and in Main& Tie circuit breakers of Transformers, Transmission lines with non-switchable line reactors	As per tender SLD, we are considering PIR and CSD as follow 1. 400kV line bay circuit breaker with PIR - 1 No (only for silchar line) 2. 400kV ICT bay with CSD- 2 No. 3. 400kV bus reactor bay with CSD - 2No. 4.400kV switchable line reactor bay with CSD - 1 No.	As per BID and BoQ	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
		and Bus reactors). The requirement of CSD shall be explicitly specified in price schedule.	4. 400kV Tie bay with PIR - 1 No. 5.400kV Tie bay with CSD - 2 No. 6. 400kV line bay circuit breaker without PIR and CSD- 1No (for byrnihat line) Please check & confirm.		
156	Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.12.1, 400kV GIS,Cl no.e)	420kV, 63kA for 3 second, SF6 gas-insulated metal enclosed Tie bay module each set comprises- Three (3) numbers 1-phase, **4000-3000-2000-1000/1A,** (0.2S-PX-PX PX-PX-PX) **6-core**, multi ratio, current transformers duly distributed on both side of circuit breaker. (Split CT details: CT-1:6 core & CT-2: 6 core).	As per CHAPTER 3: DRAWINGS AND DOCUMENTS, 400kV GIS,Cl No.e), it is mentioned that - "420kV, 63kA for 3 second, SF6 gas-insulated metal enclosed Tie baymodule each set comprises -Three (3) numbers 1-phase, **2000-1000-500/1A**, (0.2S-PX-PX-PX-PX-PXPX) **7-core**, multi ratio, current transformers duly distributed on both sideof circuit breaker." However, as per chapter 2 & 3, the CT ratios and numner of cores are contradicting each other. We are requesting AEGCL to confirm actual CT rating & no of core to be considered	Chapter 3 Page No 50 to 57 Deleted	Table 2(Vol-II), Sl No. 8
157	Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.12.1, 400kV GIS,Cl no b,c	420kV, 63kA for 3 second, SF6 gas-insulated metal enclosed line bay module each set comprises- Three (3) numbers 1-phase, **3000-2000-1000/1A**, (0.2S-PX-PX-PX-PX PX) **6-core**, multi-ratio, current transformer duly distributed on both side of circuit breaker. (Split CT details: CT-1:3 core & CT-2: 3 core)	As per CHAPTER 3: DRAWINGS AND DOCUMENTS, 400kV GIS,Cl No.b), it is mentioned that - "Three (3) numbers 1-phase, **2000-1000-500/1A**, (0.2S-PX-PX-PX-PXPX-PX) **7-core**, multi-ratio, current transformer duly distributed on both side of circuit breaker." However, as per chapter 2 & 3, the CT ratios and number of cores are contradicting each other. We are requesting AEGCL to confirm actual CT rating & no of core to be considered	Chapter 3 Page No 50 to 57 Deleted	Table 2(Vol-II), Sl No. 8
158	Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.12.1, 400kV GIS,Cl no d & e	420kV, 63kA for 3 second, SF6 gas-insulated metal enclosed **ICT & bus reactor bay** module each set comprises-Three (3) numbers 1-phase, 2000-1000-500A/1, (0.2S-PX-PX-PX-PX- PX) **6-core**, multi ratio, current transformers duly distributed on both side of circuit breaker. (Split CT details: CT-1:3 core & CT-2: 3 core)	As per CHAPTER 3: DRAWINGS AND DOCUMENTS, 400kV GIS, Cl No. c& d), it is mentioned that - "Three (3) numbers 1-phase, 2000-1000-500A/1,(0.2S-PX-PX-PX-PX-PXPX) **7-core**, multi ratio, current transformers duly distributed on both side of circuit breaker." However, as per chapter 2 & 3, the CT ratios and number of cores are contradicting each other. We are requesting AEGCL	Chapter 3 Page No 50 to 57 Deleted	Table 2(Vol-II), Sl No. 8

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
			to confirm actual CT rating & no of core to be considered		
159	Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.12.1, 220kV GIS,Cl no.b)	245kV, 50kA for 3 second, SF6 gas-insulated metal enclosed ICT# module each set comprises- Three (3) numbers 1-phase, **1600-800/1A**, (0.2S-PX-PX-PX-PX-PX), 6 core, multi ratio, current transformers duly distributed on both side of circuit breaker. (LV side of 500MVA) (Split CT details: CT-1:3 core & CT-2: 3 core)	As per CHAPTER 3: DRAWINGS AND DOCUMENTS, 220kV GIS,Cl No.b), it is mentioned that - "245kV, 50kA for 3 second, SF6 gas-insulated metal enclosed ICT & line bay# module each set comprises -Three (3) numbers 1-phase, **1600-1200/1A** , (0.2S-PX-PX-PX-PX-PX), 6-core, multi ratio, current transformers duly distributed on both side of circuit breaker." (LV side of 500MVA) However, as per chapter 2 & 3, the CT ratios and number of cores are contradicting each other. We are requesting AEGCL to confirm actual CT rating & no of core to be considered	Chapter 3 Page No 50 to 57 Deleted	Table 2(Vol-II), Sl No. 8
160	Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.12.1, 220kV GIS,Cl no.c)	245kV, 50kA for 3 second, SF6 gas-insulated metal enclosed line bay# module each set comprises- Three (3) numbers 1-phase, **1600-800/1A**, (0.2S-PX-PX-PX-PX-PX), 6 core, multi ratio, current transformers duly distributed on both side of circuit breaker. (Split CT details: CT-1:3 core & CT-2: 3 core)	As per CHAPTER 3: DRAWINGS AND DOCUMENTS, 220kV GIS,Cl No.c), it is mentioned that - "Three (3) numbers 1-phase, **1600-1000A/1A** (0.2S-PX-PX-PX-PX-PX), 6-core, multi ratio, current transformers duly distributed on both side of circuit breaker." However, as per chapter 2 & 3, the CT ratios and number of cores are contradicting each other. We are requesting AEGCL to confirm actual CT rating & no of core to be considered	Chapter 3 Page No 50 to 57 Deleted	Table 2(Vol-II), Sl No. 8
161	Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.12.1, 220kV GIS,Cl no.d)	245kV, 50kA for 3 second, SF6 gas-insulated metal enclosed Bus Coupler baymodule each set comprises-Three (3) numbers 1-phase, **3000-1600-800/1-1-1-1-1A,** (0.2S-PX-PX PX-PX-PX), 6-core, multi ratio, current transformers duly distributed on both side of circuit breaker.	As per CHAPTER 3: DRAWINGS AND DOCUMENTS, 220kV GIS,Cl No.d), it is mentioned that - "245kV, 50kA for 3 second, SF6 gas-insulated metal enclosed Bus Coupler bay module each set comprises-Three (3) numbers 1-phase, **1600-1000/1-1-1-1-1A,** (0.2S-5P20-PX-PXPX), 5-core, multi ratio, current transformers duly distributed on both side of circuit breaker."	Chapter 3 Page No 50 to 57 Deleted	Table 2(Vol-II), Sl No. 9

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
			However, as per chapter 2 & 3, the CT ratios and number of cores are contradicting each other. We are requesting AEGCL to confirm actual CT rating & no of core to be considered		
162	CHAPTER – 28: SPECIFICATION FOR DCDB, Cl no.28.1,	As per referred clause, Two numbers of D.C. Panel for distribution of D.C. supply associated with DC Supply of 400, 220,132 and 33kV System at different points in Control Room, Switch Yard and other locations as per need. The DC Panel shall have Two Incomer connected with Battery Charger -1 & Battery Charger -2 wrt to Battery set - 1 & Battery set - 2.	As per BoQ - Supply Sub Sonapur - Sl No. 17.03 - 220V, DCDB quantity is mentioned as 4 sets. With respect to above, we are requesting AEGCL to clarify the following points regarding DCDB : a) We understand that among 4 sets of DCDB, 2 sets of DCDB shall be provided for 400kV GIS building and another 2 sets of DCDB shall be provided for 220kV in 220kV GIS building/CRB. b) Kindly provide the typical Auxiliary LV AC & DC Distribution SLD.	As per BoQ	
163	CHAPTER – 27: SPECIFICATION FOR ACDB, Cl no.27.5,i)	In case of 400KV sub-station, AC source shall be supplied separately from LT side of 2 numbers,1000KVA, 33/0.415KVstation service transformers through cable as per tender auxiliary SLD.	As per BoQ - Supply Sub Sonapur - Sl No. 17.7- Main ACDB quantity is mentioned as 4 sets. With respect to above, we are requesting AEGCL to clarify the following points regarding DCDB : a) We understand that among 4 sets of ACDB, 2 sets of ACDB shall be provided for 400kV GIS building and another 2 sets of ACDB shall be provided for 220kV in 220kV GIS building/ CRB. b) Kindly provide the typical Auxiliary LV AC & DC Distribution SLD	As per BoQ	
164	CHAPTER – 27: SPECIFICATION FOR ACDB, Cl no.27.5,i)		We understand ACDB & DCDB feeders shall be worked out by bidder for present scope of work only, future bays load will not be considered. Please confirm.	As per BID	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
165	CHAPTER – 27: SPECIFICATION FOR ACDB, Cl no.27.5,iv)Main ACDB: (415V)	2000 A,4P Air Circuit Breaker and CT (of requisite rating) for 33/0.415 V station service transformers as INCOMER I for ACDB 1 • 2000 A,4P Air Circuit Breaker and CT (of requisite rating) for 33/0.415 V station service transformers as INCOMER II for ACDB 2 • 2 numbers 2000A, 4P Air Circuit Breaker along with 2 sets of CTs (of requisite rating) as Bus- coupler	We understand that only 1 no of 2000A , 4P Air Circuit Breaker along with 2 sets of CTs (of requisite rating) as Bus- coupler for ACDB 1 & ACDB 2 is required. Please confirm whether the bidder understanding is correct.	As per BID	
166	CHAPTER – 27: SPECIFICATION FOR ACDB, Cl no.27.5,iv)Main ACDB: (415V)	Interlocks with DG set shall be provided as per requirement and the same shall be decided during detailed engineering.	As per CHAPTER – 27: SPECIFICATION FOR ACDB, Cl no.27.5,v)Sub ACDB: (415V),DG incomer (with AMF Panel) shall be connected to Sub ACDB-1 and Sub-ACDB-2. Also, as per Cl no.27.6 INTERLOCK LOGIC, interlock logic with Incomer I & Incomer II of Sub-ACDB with DG-Incomer Breaker is specified. However, as refered to the clause,provision of interlocks for Main ACDB with DG is mentioned. We are requesting AEGCL to specify the connection of DG (1no as per BPS) either with Sub-ACDB or Main ACDB.	During Detail Engineering	
167	DSLP Layout Plan & Sections Drawing no. NAC/AEGCL/Sonapur/DSLP-005 SHT 4 of 4 rev.7	As refered to DSLP layout drawings, Layout is as per Raezvig method of DSLP Protection.	Whereas, as per CHAPTER 2: INFORMATION TO BIDDERS (ITB) clause no. 2.6.12.1.II.E.d) Rolling sphere method shall be considered for DSLP protection.However as per drawings we understand that DSLP shall be as per Raezvig method. We understand that bidder need to consider raezvig method for DSLP. Please confirm.	As per bid	
168	CHAPTER 20: TECHNICAL SPECIFICATION FOR XLPE CABLE WITH TERMINATION, Clause no. 20.5.6.	As per referred clause, short circuit rating of metallic sheath for 220kV cable is 50kA for 3 Second.	Whereas, CHAPTER 20, Cl No. 20.54,Sl no. 14 states short circuit rating of metallic sheath for 220kV cable as 50kA for 1 Second. Please Clarify whether short circuit rating of metallic sheath is 50kA for 3 Second or 50kA for 1 Second.	50kA for 3 sec	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
169	CHAPTER 20: TECHNICAL SPECIFICATION FOR XLPE CABLE WITH TERMINATION, Clause no. 20.4	As per referred clause, Seamless Corrugated Aluminium Sheath is required.	Whereas, as per CHAPTER 20,Cl No. 20.54,Sl no. 16.9, Seamless or Seam welded Corrugated Aluminium Sheath is required. Please Clarify whether the Metallic Sheath is Seamless or Seam welded corrugated Aluminium Sheath.	Seam welded corrugated Aluminium Sheath.	
170	CHAPTER 20: TECHNICAL SPECIFICATION FOR XLPE CABLE WITH TERMINATION	The Clause no. 20.8, specify the oxygen index and temperature index test as per ASTM D-2863 & Chemical composition test for verifying lead sheath composition test.	Please note that these tests are not applicable for 220kV cable as cable shall have HDPE outer sheath and corrugated Aluminium Sheath.	Accepted	
171	CHAPTER 15: SUBSTATION AUTOMATION SYSTEM, 15.12. GATEWAY	The Substation Automation System shall have the capability to support simultaneous communications with SLDC.	As per the Cl no. 15.2 GATEWAY, **SLDC Communication Interface-**Employer will supply communication channels between the Substation Automation System and the SLDC. The communication channels provided by Employer will consist either of power line carrier or optical fiber. For same, please furnish the following details: 1. Make & Model of existing FOTE/PLCC at SLDC.	No Software or Hardware upgradation will be required at SLDC end. Gateway Data Configuration should be done as per SLDC's specification. The communication channel from wideband locations, ie. Silchar, Sonapur, Sarusajai and Byrnihat to SLDC will be under AEGCL's scope. However, any requirement of Modem or Switches at Sub Station for integration with PLCC/FOTE 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.	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
172	CHAPTER 15: SUBSTATION AUTOMATION SYSTEM, Automation standard	The communication link (PLCC / Fiber Optic) to SLDC is not in the scope of the bidder. However, the bidder will provide required modem both for PLCC and Fibre Optic communications to the nearest Wide Band Locations of STU/CTU which are connected to SLDC. **It shall be the bidder's responsibility to integrate the offered system for desired exchange of telemetry data to SLDC**	As referred to the clause, - 1. We understand that bidder is responsible for PLCC /FOTE work at substation end only. We are not considering any modifications at SLDC/STU/CTU end. 2. Please furnish Make & model of PLCC & FOTE at STU/CTU.	No Software or Hardware upgradation will be required at SLDC end. Gateway Data Configuration should be done as per SLDC's specification. The communication channel from wideband locations, ie. Silchar, Sonapur, Sarusajai and Byrnihat to SLDC will be under AEGCL's scope. However, any requirement of Modem or Switches at Sub Station for integration with PLCC/FOTE 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.	
173	CHAPTER 15: SUBSTATION AUTOMATION SYSTEM, Automation standard	Equipment required for data transfer to the existing SCADA network to interface communication equipment is in the bidder's scope of work and it will be included in the bid price.	Please furnish the details of Existing make of SCADA & Software version at existing Station.	As per Revised BOQ	
174	CHAPTER 31: TECHNICAL SPECIFICATIONS OF POST INSULATORS		As per BOQ Sr no.2, Describes for Polymer Insulator requirements whereas as per referred technical Specification mentioned for Porcelain Insulator. Please confirm the Requirement of Insulator (Porcelain or Polymer) to be considered	Polymer	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
175	CHAPTER 9: TECHNICAL SPECIFICATIONS OF XLPE INSULATED COPPER CONTROL AND POWER CABLE	BOQ, Sl. No-22 , LT Power Cable (1.1kV grade XLPE copper)	We are requesting AEGCL to consider aluminum conductor for power cables where size of cable is shall be minimum 10 sq.mm as per standard practice	As per BoQ	
176	Price schedule, BoQ2 - Supply Sub bay works - Sl No. 3.01 - Line bay module	1 no of Line bay Module (3- Ø 220 kV, 3150 A, 50 kA-3 sec, metal enclosed SF6 Gas Insulated Switchgear)	However, as per Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.11.C,"Construction of 2 numbers of line bays for the incoming 220kV Circuits with 220kV GIS bus extension "are under present scope. Kindly check & update the quantity.	As per Revised BOQ	
177	Price schedule, BoQ2 - Supply Sub bay works - Sl No. 3.03 -SF6 to air bushing module	245kV, 50kA for 3 sec, SF6 to Air Bushing along with termination module & support structure for outdoor connections to connect GIS with 245kV side of Power transformer and overhead lines.- 3No	However, as per Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.11.C,"Construction of 2 numbers of line bays for the incoming 220kV Circuits with 220kV GIS bus extension" are under present scope and only **3 no** of SF6 to air bushing modules are mentioned instead of **6 No.** Kindly check & update the quantity.	As per Revised BOQ	
178	Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004)		As per referred electrical layout, Double break isolator with **one earth switch** is indicated 220kV Line bays. However, in BoQ-2, supply sub bay works, as per Sl. No 2.02, Horizontal Double Break Type Isolator with double earth switch is mentioned for Line bays. Hence please check and confirm the requirement.	As per BoQ	
179	Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.11,C) Bay Works at 220kV Existing Sonapur GSS		Please furnish the following drawings/documents of existing 220kV Existing Sonapur GSS: a) Existing Layout and SLD(With current ratings, fault ratings, Creepage etc.) of 220kV GIS b) Control Building/LCR Layout along with sections c) Typical AC/DC SLD d) Existing 220kV Substation Earthing Layout or existing Earth mat spacing. e) Existing 220kV Substation cable Trench Layout f) AC Kiosk / Switchyard panel room layout	During Detail Engineering	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
			g) Existing 220kV Substation overall Layout		
180	Existing 220kV GIS building- General		Please clarify, whether any dismantling/ shifting is required to accommodate the 2 no. of extension bays as per present scope. If required, please add a suitable line item for same.	As per BoQ	
181	Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.11,C) Bay Works at 220kV Existing Sonapur GSS		As per scope of work, Extension of GIS is in the scope. In this regard, please furnish the following for existing Station a) What is the free space available inside the GIS Hall. Please specify the length & width available for bay extension. b) Availability of interface/extension module in the existing 220kV GIS. c) Make & Model number of existing GIS	During Detail Engineering and based on the Site Visit of the contractor.	
182	Existing 220kV GIS building- General		Please clarify, whether adequate space is available outside the existing 220kV GIS building for SAB, LA and CSE installation. Further, we presume that existing 220kV Existing Sonapur GSS has sufficient space to accommodate the extension bays. Please confirm.	Confirmed	
183	Existing 220kV GIS building- General		Please confirm whether orientation of 2 no of line bays shown in Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004) at existing 220kV GIS hall is fixed.	During Detail Engineering	
184	Existing 220kV GIS building- General		Please clarify, whether existing Control Building/LCR is adequate for installation of CRP for present scope of bays.	Please follow the updated BoQ.	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
185	Existing 220kV GIS building- General		During our site survery, we have observed space constraints for 2 Nos Bays with Coupling and GIB Connection for 1 bay with outdoor equipments as per layout. Kindly confirm the bay extension scope clearly with layout drawing.	Please refer addendum.	Table 2(Vol-II), Sl No. 2
186	Existing 220kV GIS building- General		During our site Survey, we have observed that the Existing 220kV GIS make is of Jiansu Jinke China and the company went bankrupt and shut down their business. Hence, integration of additional bays without OEM presence shall be difficult. Instead, we propose new bays (2 Nos) or replacement of entire bays for future maintenance perspective. Kindly confirm.	As per BID	
187	Price schedule, BoQ2 - Supply Sub Bay works - Sl No. 8-Battery & Battery Chargers, DCDB & ACDB as per specification		We presume that as it is a existing substation sufficient number of spare feeders will be available in 220V & 48V DC distribution board. Hence, no need to supply additional DCDB along with battery & battery charger. Please check & confirm.	As per BoQ	
188	Price schedule, BoQ2 - Supply Sub Bay works - Sl No. 8-Battery & Battery Chargers, DCDB & ACDB as per specification		In addition to above query, if there is requirement for additional DCDB along with battery & battery charger. Kindly furnish below details- 1.Details of Incomer feeder - required cable size, from where we need to take incomer 2.No.of bays for which feeders required. 3.No of applications for which battery to be sized.	As per BoQ	
189	ACDB		We understand that the sufficient number of spare feeders are available in AC distribution board in 220kV Existing Sonapur GSS to provide the AC power supply to battery chargers, panels etc. which are supplied under present scope. Please confirm. If required, Please add a suitable line item & kindly furnish the below details- 1.Details of Incomer feeder - required cable size, from where we need to take incomer	As per BoQ	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
			2.No.of bays for which feeders required. 3.No of applications for which battery to be sized.		
190	NMS integration Vol.II, CHAPTER 29: SPECIFICATIONS FOR COMMUNICATION EQUIPMENT FOR ESTABLISHMENT OF FIBRE OPTIC COMMUNICATION SYSTEM Clause No. 29.1 Scope and General Requirements	The Tenderer is supposed to make necessary survey for integration of the SDH Equipment with the existing NMS at SLDC, Kahilipara. For this if any traffic routing to SLDC is required through other Utilities; AEGCL will arrange the same. However, during interfacing with the existing telecom equipment if any hardware/software is required (at SLDC or Remote end), the Bidder has to offer the same with no cost implication to AEGCL.	As per referred clause, Integration of Communication Equipment for Fibre Optic Communication System with existing NMS at SLDC is under the present scope. Please clarify the **Make and model no**. of existing NMS at SLDC.	No NMS integration under the scope of this bidder	
191	CDCS integration		We understand that integration with existing CDCS at SLDC in not under present scope. Incase same needs to be considered under present scope, client is requested to provide make & Model no. of existing CDCS and requested to issue suitable amendment for the same.	Integration with existing CDCS at SLDC is under the scope of the successful bidder. CDCS SAMAST METERING Make: Server (HP); Model: HP ProLiant DL 360 R440; Storage server: DELL EMC2.	
192	Vol.II, CHAPTER 2: INFORMATION TO BIDDERS (ITB), Clause No. 2.6.11,C) Bay Works at 220kV Existing Sonapur GSS Bus bar integration	As per referred clause, "Complete ETC of the bays including GIS Bus Extension" is under the scope of the successful bidder."	In reference to same, **add a suitable line item** in BoQ-2. And please clarify the following points for Bus bar integration at existing 220kV Existing Sonapur GSS. a) Make and model no. of the existing bus bar protection b) Single/Redundant Bus bar Protection c) Centralized or Decentralized? d) If decentralized 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?	As per site visit of the EPC Contractor	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
193	Communication		We are not envisaging any communication integration works at existing 220kV Existing Sonapur GSS 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 up to the substation gateway. We are not envisaging any modification of software / hardware at existing stations/SLDC/RLDC. Further, we presume that suitable communication links are already available between existing 220kV Existing Sonapur GSS to SLDC/RLDC Station. We are not envisaging any communication links in our scope of supply. Please Confirm. Kindly add suitable line item.	Communication between old and new GIS through FO Link	
194	Communication details		Please furnish below details w.r.t Existing FOTE details at Existing Sonapur old substation a) Make b) Model number c) Transmission capacity (STM-1/SM-4/STM-16) d) Number of spare tele protection interface cards e) Number of spare data interface cards f) Number of speech interface cards g) Please provide Existing drawings h) Please specify the requirement of Digital protection coupler at remote end stations i) Please specify the requirement of Fiber distribution panel at remote end stations ?	No FOTE	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
195	Price schedule, BoQ2 - Supply Sub Bay works - Sl No. 5.08 -Earthing		We presume that as it it is a existing substation, there is no requirement of any soil treatment at the existing station. Please confirm & furnish the below details- 1. Spacing between main mat of existing substation 2.Existing 220kV Earth mat layout.	During Detail Engineering	
196	Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004)		CVT not shown in the referred layout at the Sonapur old substation. However same is required as per BOQ. Please check and revise the layout accordingly.	As per BoQ	
197	Electrical Layout Plan & section (Drawing no NAC/AEGCL/Sonapur/EL-004)		Towers with beam shown in the referred layout at Sonapur old substation for 220kV lines. However same is not required as it is connecting with cable. Please check and revise the layout and BOQ accordingly.	As per BoQ	
198	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.	As per BoQ6 and Site Visit of the Contractor	
199	BOQ-1 - 11.10	400kV, 63kA for 3 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, line reactor bay and bus reactor bays as per site requirement. (for both indoor and outdoor of GIS)	Please quantify the busduct requirement.	Shall be as per the Tender Drawings.	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
200	BOQ-1 - 12.06	245kV, 50kA for 3 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 as per site requirement. (for both indoor and outdoor of GIS)	Please quantify the busduct requirement.	Shall be as per the Tender Drawings.	
201	BOQ-3 - 3.04	245kV, 50kA for 3 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 Line bays as per site requirement. (for both indoor and outdoor of GIS)	Please quantify the busduct requirement. And provide site layout. As it is an extension requirement, request to share existing GIS layout, GTP, section, SLD, extension module drawing.	Will be shared during detail engineering	
202	CHAPTER 2: INFORMATION TO BIDDERS (ITB) , 2.6.12.1 400kV GIS - a)	enclosed bus bar of 420kV, each set comprising of the following: - i. Three (3) individual bus bars enclosures running across the length of the switchgear to interconnect each of the circuit breaker bay modules in one and a half breaker bus system **ii. One (1) number 3-phase, single pole 4000A, group operated isolator. switches, complete with manual and motor driven operating mechanisms. (Exact Number shall be as per OEM Type Tested Design)** iii. One (1) number 3-phase, single pole group operated safety grounding switches, complete with manual and motor driven operating mechanisms. (Exact Number shall be as per OEM Type Tested Design) **iv. Three (3) numbers 1-phase Potential Transformers with Isolating Link**	For isolation purpose of Voltage Transformer during HV Test, motorized disconnectors as well as Potential Transformers with Isolating Link both are mentioned in given reference clause. In order to fulfill the purpose, Potential Transformers with manual Isolating Link will be sufficient. There will not be any requirement of motorized disconnectors. Kindly provide confirmation on same.	Motorized Disconnector shall be provided	
203	CHAPTER 2: INFORMATION TO BIDDERS (ITB) , 2.6.12.1 220kV GIS- a)	a) Set of 3-single(isolated) phase/Three phase, 3150A, 50kA for 3 second, SF6 gas- insulated metal enclosed bus bar of 245kV, each set comprising of the following:- i. Bus bars enclosures running across the length of the switchgear to interconnect each of the circuit breaker bay modules in Double Bus bar system.	For isolation purpose of Voltage Transformer during HV Test, motorized disconnectors as well as Potential Transformers with Isolating Link both are mentioned in given reference clause. In order to fulfill the purpose, Potential Transformers with manual Isolating Link will be sufficient. There will not be any requirement of motorized disconnectors. Kindly provide	Motorized Disconnector shall be provided	

<table>
<tr><th>SL No</th><th>Clause No./ Section/ Page No.</th><th>Description</th><th>Queries</th><th>Response</th><th>Reference to Sl. No. of Addendum [Table 2] wherever applicable</th></tr>
<tr><td></td><td></td><td>ii. One (1) number 3-phase, 3150A, group operated isolator switches, complete with manual and motor driven operating mechanisms. (Exact Number shall be as per OEM Type Tested Design)
iii. One (1) number 3-phase, single pole group operated safety grounding switches, complete with manual and motor driven operating mechanisms. (Exact Number shall be as per OEM Type Tested Design)
iv. Three (3) numbers 1-phase Potential Transformers with Isolating Link</td><td>confirmation on same.</td><td></td><td></td></tr>
<tr><td>204</td><td>CHAPTER 2: INFORMATION TO BIDDERS (ITB) , 2.6 400kV Gas Insulated Switchgear</td><td>CT ratios for 400kV GIS are given as below for:<table><tr><th>Field Type</th><th>Current Ratio</th></tr><tr><td>1. Line CT</td><td>3000-2000-1000/1A</td></tr><tr><td>2. ICT bay CT
3. Bus Reactor CT
4. Line Reactor CT</td><td>2000-1000-500/1A</td></tr><tr><td>5. Tie Feeder</td><td>4000-3000-2000-1000/1A</td></tr></table></td><td>CT ratios and parameters given in reference clause are not matching with CT ratios and parameters given in CHAPTER 3: DRAWINGS AND DOCUMENTS. Kindly confirm which CT ratio & specifications should we follow. We also request you to provide burden, Rct, Iexc and Vk values for CT cores.</td><td>Shall be as per Chapter 2 (ITB).</td><td></td></tr>
<tr><td>205</td><td>CHAPTER 3: DRAWINGS AND DOCUMENTS, 400kV Gas Insulated Switchgear</td><td>CT ratios for 400kV GIS are given as below for:<table><tr><th>Field Type</th><th>Current Ratio</th></tr><tr><td>1. Line CT
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4. Tie Feeder</td><td>2000-1000-500/1A</td></tr></table></td><td>CT ratios and parameters given in reference clause are not matching with CT ratios and parameters given in CHAPTER 2: INFORMATION TO BIDDERS (ITB). Kindly confirm which CT ratio & specifications should we follow. We also request you to provide burden, Rct, Iexc and Vk values for CT cores.</td><td>Shall be as per Chapter 2 (ITB).</td><td></td></tr>
<tr><td>206</td><td>CHAPTER 2: INFORMATION TO BIDDERS (ITB) , 2.6 245kV Gas Insulated Switchgear</td><td>CT ratios for 245kV GIS are given as below for:<table><tr><th>Field Type</th><th>Current Ratio</th></tr><tr><td>1. ICT Bay - 500MVA
2. Line bays</td><td>1600-800/1A</td></tr><tr><td>3. ICT Bay - 160MVA</td><td>800-600/1A</td></tr><tr><td>4. Bus Coupler</td><td>3000-1600-800/1A</td></tr></table></td><td>CT ratios and parameters given in reference clause are not matching with CT ratios and parameters given in CHAPTER 3: DRAWINGS AND DOCUMENTS. Kindly confirm which CT ratio & specifications should we follow. We also request you to provide burden, Rct, Iexc and Vk values for CT cores.</td><td>Shall be as per Chapter 2 (ITB).</td><td></td></tr>
<tr><td>207</td><td>CHAPTER 3: DRAWINGS AND DOCUMENTS, 245kV Gas Insulated Switchgear</td><td>CT ratios for 245kV GIS are given as below for:<table><tr><th>Field Type</th><th>Current Ratio</th></tr><tr><td>ICT Bay - 500MVA</td><td>1600-1200/1A</td></tr><tr><td>ICT Bay - 160MVA</td><td>800-600/1A</td></tr><tr><td>Line Bay and Bus Coupler</td><td>1600-1000/1A</td></tr></table></td><td>CT ratios and parameters given in reference clause are not matching with CT ratios and parameters given in CHAPTER 2: INFORMATION TO BIDDERS (ITB). Kindly confirm which CT ratio & specifications should we follow. We also request you to provide burden, Rct, Iexc and Vk values for CT cores.</td><td>Shall be as per Chapter 2 (ITB).</td><td></td></tr>
</table>

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
208	CHAPTER 3: DRAWINGS AND DOCUMENTS - C - i &ii	1-phase SF6/ air bushings along with terminal connectors	Terminal connector is excluded from GIS OEM scope of supply.	Shall be under the scope of the GIS OEM	
209	CHAPTER 3: DRAWINGS AND DOCUMENTS - D	Testing and Maintenance Equipment as per BPS	Testing and Maintenance Equipment are excluded from GIS OEM scope of supply	Shall be under the scope of the GIS OEM	
210	16.4.3	The switchgear, which shall be of modular design, shall have complete phase isolation.	As mentioned in CHAPTER 2: INFORMATION TO BIDDERS (ITB) , 2.6.12.1 220kV GIS- a): Set of 3-single(isolated) phase**/Three phase**, 3150A, 50kA for 3 second, SF6 gas- insulated metal enclosed bus bar of 245kV, **Hence, for 220kV GIS we are following three phase encapsulated busbar design. Other compartments of GIS shall be of isolated phase.**	Single phase encapsulated bus bars(three isolated phase) bus bar enclosure design will be preferred	
211	16.4.9	Continuous bus lengths without gas segregation shall not be acceptable for any voltage level.	Please note that, proposed busbar design is passive. We meet the requirement of service continuity, maintenance & repair without provision of any barrier in busbar. In addition to that by putting additional gas compartment/ barrier in busbar we are indirectly increasing gas leakage points in GIS. This type of passive non segregated busbar design is type tested as per IEC 62271-203 and accepted by various state & central utilities. hence, we request your acceptance on this design.	"As per BID. The bus bars shall be segregated after each bay module (line/transformer/tie/bus coupler etc.)"	
212	16.4.7	100 micro-meter or smaller sintered stainless-steel particle filtered disc shall be provided in gas filling port.	Gas filling shall be done using particle filter; hence we do not envisage such filter. However separate filter unit can be used with supplied filling ports during gas handling in future.	As per BID.	
213	16.4.9	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	Output shall be 4-20mA	
214	16.4.11	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.	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
215	16.4.12	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.	
216	16.4.14	Equipment. Inspection windows (View Ports) shall be provided for Disconnect Switch and both type of earth switches i.e. Maintenance and fast operating. Stroboscopic port shall also be provided.	View ports for DS & ES shall be provided. No stroboscopic port is available in market for GIS.	As per BID.	
217	16.4.17	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 contigency requirements	As per BID.	
218	16.4.19	The switchgear when installed and operating under the ambient conditions shall perform satisfactorily and safely under all normal and fault conditions. Even repeated operations up to the permissible servicing intervals under 100% rated and fault conditions, shall not diminish the performance or significantly shorten the useful life of the switchgear.	The switchgear is equipped with all necessary arrangements for protection from any internal and external faults without deteriorating its performance below recommended level. However, it is requested to inform the manufacturer in the event of any abnormal condition during its operation, so that suitable solution can be given.	As per BID.	
219	16.4.27	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.	
220	16.4.35	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 accesible using walkway and portable ladder, thus provision of portable scissor lift is not envisaged	As per BID.	

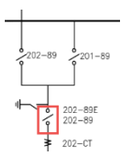
SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
221	3.1 GAS INSULATING SYSTEM:	ii) Any other alarm necessary to indicate deterioration of the gas insulating system.	Not applicable for offered GIS	As per BID.	
222	16.4.43.2	The contractor shall supply the entire material for grounding bus of GIS viz conductor, clamps, joints, operating and safety platforms etc. The contractor is also required to supply all the earthing conductors and associated hardware material for connecting all GIS equipment, bus ducts, enclosures, control cabinets, supporting structure, GIS surge arrestor etc. to the ground bus of GIS.	Excluded from GIS OEM scope of supply	Shall be under the scope of the GIS OEM	
223	16.4.43.3	The enclosure of the GIS may be grounded at several points so that there shall be grounded cage around all the live parts. A minimum of two nos. of grounding connections should be provided for each of circuit breaker, current transformers, voltage transformers, cable terminals, surge arrestors, earth switches and at each end of the bus bars.	GIS shall meet earthing requirements as per relevant IEEE publication.	As per BID	
224	16.4.43.6 -c	Equipotential Earthmat: (below the GIS)	Excluded from GIS OEM scope of supply	Shall be under the scope of the EPC	
225	16.4.43.6 - c	EARTHING CONDUCTOR SHALL BE OF COPPER AND SIZE MAY VARY AS PER EARTHING CALCULATION AND THE SAME WILL BE DECIDED DURING DETAILED ENGINEERING.	Both copper and steel earthing conductor shall be proposed. During execution suitable material shall be selected.	As per BID	
226	16.4.49	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	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
227	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.	For Future Extension, The Future Extension Module with Isolating Link shall be provided to support Extension of any Bus Configuration of Other GIS OEM.	
228	16.4.52 vi.	DOCUMENTATION: vi. GIS Component Drawings	Being intellectual property, manufacturing drawings cannot be shared.	To understand the link/bend arrangement inside the GIS and external component location like PD sensors, PRD port, stroboscopic port, gas density monitor probe connection etc., the GA of GIS components is required.	
229	16.4.52 xxiii.	Capacity calculation of EOT crane for GIS hall considering a factor of safety of 5	excluded from GIS OEM scope	Accepted	
230	16.5.1.2	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 BoQ	
231	16.5.1.7.4	The breaker should be able to withstand all dielectric stresses imposed on it in open condition at lockout pressure continuously (i.e. 2 p.u. power frequency voltage across the breaker continuously)	The breaker should be able to withstand all dielectric stresses imposed on it in open condition at lockout pressure continuously (i.e. 2 p.u. power frequency voltage across the breaker for a specified period of time)	As per BID	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
232	16.5.1.10	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 under the scope of the GIS OEM	
233	16.5.1.14.2.19	DISCONNECTORS (ISOLATORS) The mechanical endurance class shall be M2 as per IEC for 400kV, 220 kV and 132kV disconnectors. Electrical endurance class shall be E2.	Mechanical endurance class shall be M2. however, electrical endurance class E2 is not applicable for disconnector switch and also not mentioned in GTP.	As per BID	
234	16.5.1.14.2.22	The degree of protection for the Drive Mechanism box of disconnector shall be IP55.	Considering Indoor requirement, IP4X class shall be sufficient. Please accept the same.	As per BID	
235	16.5.1.15.10	The safety grounding switches shall conform to the requirements of IEC- 62271- 102 and shall have electrical endurance class: E2 & shall have mechanical endurance class M2 for 400 kV/220/132 kV voltage level.	Mechanical endurance class shall be M2. however, electrical endurance class shall be E0 for maintenance earth switch in line with IEC and type test report.	As per BID	
236	16.5.1.15.15	The degree of protection of the Drive Mechanism box of maintenance earth switch shall be IP55.	Considering Indoor requirement, IP4X class shall be sufficient. Please accept the same.	As per BID	
237	16.5.1.13	HIGH SPEED MAKE PROOF GROUNDING SWITCHES These shall confirm to class F and electrical endurance class E2 and mechanical endurance class M2.	Electrical endurance class shall be E1 and mechanical endurance class M1 for high speed earth switch in line with IEC and type test report which is in line with tender GTP.	As per BID	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
238	16.5.1.17.2	VOLTAGE TRANSFORMERS PT shall be provided with isolating link through external operation for the purpose of high voltage testing of GIS.	Please note, we are offering VT with manual IID. Request to accept the same.	Not accepted	
239	16.5.1.15	Insulation co-ordination and selection of surge arrestor	Excluded from GIS OEM scope of supply	Shall be under the scope of the GIS OEM	
240	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	
241	16.5.1.22.2.1	Minimum degree of protection of enclosure of LCC shall be IP55	Considering Indoor requirement, IP4X class shall be sufficient. Please accept the same.	Not accepted	
242	16.5.1.23.1	The core insulation and outer sheath of cable shall be of halogen-free special polymer.	Request to accept FRLS cables for cabling of LCC panel and GIS equipments.	As per BID	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
243	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	Accepted. However, The storage area for GIS shall be as per GIS OEM recommendation	
244	16.10	All transport packages containing critical units viz Circuit breakers and Voltage transformers shall be provided with sufficient number of impact recorders (on returnable basis) during transportation to measure the magnitude and duration of the impact in all three directions. In case of electronic impact recorder, the recording shall commence in the factory and must continue till the units reach site. The data of electronic impact recorders shall be downloaded at site and a soft copy of it shall be handed over to Engineer	GIS modules are rigidly build and does not gets affected by transportation vibrations. Large modules are shipped by splitting into small parts to reduce mechanical stress during transport. However, mechanical type shock indicators shall be provided for critical items like CB, CT, VT. Request your acceptance on same.	As per BID	
245	16.13	Power frequency tests for the completed GIS at site shall be possible without removing the voltage transformers. The power frequency test voltage at site shall be 80% of the factory test voltage for 1 min at 100Hz.	Please note, during HV test at site voltage transformers shall be disconnected.	As per BID	
246	16.16.7	Special Tools	Special tools shall be quoted as per BOQ.	As per BoQ	
247	16.16.7	16.16 TESTING & MAINTENACE EQUIPMENT	Excluded from GIS OEM scope of supply	Shall be under the scope of the GIS OEM	
248	32.2	220kV GIS MANADATORY SPARES	Spares have been given in PRICE SCHEDULE. Mandatory Spares are different than spares given in clause number 32.2 of technical specifications. Kindly confirm which one should we follow.	As per BoQ	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
249		Training	Site Training shall be given by site engineer during ETC activity. No factory training is envisaged. Any expenses like food, lodging, boarding, travel of trainees etc are excluded from GIS OEM scope.	Training shall be as per the BID Clause. Factory Training shall be considered as per BID Clause. ALL the expenses including travel, food, lodging shall be under the scope of the OEM/EPC as per their agreement and shall be quoted in the relevant Line Item of the BoQ.	
250	-	VT parameter	Kind share complete VT parameters for both 220kV and 400kV Substations.	Will be shared during detailed engineering	
251	245kV Gas Insulated Switchgear	3- Ø 220 kV, 3150 A, 50 kA-3 sec, metal enclosed SF6 Gas Insulated Switchgear - 500MVA Transformer bay Module as per technical specification	We understand the incoming power to 220kV ICTs are coming from 500MVA, 3-Ph 400/220/33kV Autotransformers. From calculation, we can arrive at current requirement for LV side(220kV) of this transformer bay is ~1313A/phase which is very less as compare to 3150A. Looking at the future extension requirement, busbar current of 3150A with Transformer feeder and Line feeders of 1600/2500A at 40 °C can be sufficient. Request your confirmation on same.	Not accepted. As per BID	
252	Tender SLD: NAC/AEGCL/RANGIA/SLD-003 R2	in 220kV GIS: One disconnector has been shown between CB and Bus disconnectors. 	Kindly note that, we are offering inline with the section project wherein three numbers of disconnectors are called in for the complete bay. as per cl. No. 2.6.12.1 - 220kV GIS - b	Shall be as per Type Tested Design	
253	Sl. 4 of BOQ2	CRP/ SAS	Any scope of CR Panel not mentioned in BOQ. Please confirm same is required for this package or not.	Please follow the updated BoQ	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
254	Sl. 15 & 16 of BOQ1	NGR Requirement	NGR not specified in BOQ. Please confirm NGR is required for this package or not.	As per BoQ	
255	Sl. 21.05 of BOQ1	1600 sqmm, 220kV, 1-Core, XLPE cable along with related accessories	Request you to please Identify the detailed route for 220 kV XLPE Cable mentioned in BOQ	During Detail Engineering	
256	GIS Extn	Bay Works at 220kV Existing Sonapur GSS	1. Technical data sheet of existing GIS substation 2. CAD file of existing GIS (dimensional drawings) is required along with below details: a) Building & existing GIS plan and section and OGA of Substation. b) Detail dimension for BB height. c) Phase-phase distances of busbar. d) Bay distances and clearance in building is also required to asses further. e) EOT Crane bottom of hook height, working envelope/reach, load bearing capacity. f) Civil details of existing project along with details of HVCO, CCO, Wall opening, floor beams, GIS mounting anchor plates (if any), etc. g) Loading/unloading platform details and Rolling shutter details inside building. h) Earthling drawing of existing project. 3. As build SLD for existing Busbar Protection. 4.Bus bar details as per IEEE Standard for designing the GIS adaptor	During Detail Engineering and as per site visit of the EPC Contractor.	
257	BOQ_57672 (BOQ 1 & 2) Energy Meter/ABT meter	SAMAST compliant ABT meters including DCU, modems, FO cables and other related accessories etc.as per specification.	We request you to provide make of Energy Meter/ABT meter.	As per BoQ	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
258	BOQ_57672 (BOQ 1 & 2) 220V& 48V Battery & Battery Charger	220V Battery & Float Cum Boost Battery Charger 48V Battery & Float Cum Boost Battery Charger	**In Sonapur New SS & Sonapur Extension,** the 220V & 48V battery & Battery Charger current rating is not specified in your given BOQ & Technical specification. Kindly provide for the same.	As per Battery Sizing Calculation/ BID	
259	BOQ_57672 (BOQ 1) 400KV Bus duct	400kV, 63kA for 3 sec, SF6 Gas Insulated Bus Duct (GIB) single phase from respective GIS bay module up to SF6 to Air bushings including required other accessories for Transformer bays, line bays, line reactor bay and bus reactor bays as per site requirement. (for both indoor and outdoor of GIS)	As per RFQ Tender BOQ, the 400KV busduct qty is mentioned in "lot". Kindly provide the qty in meter should be every bidder can be same platform or else provide the AUTOCAD drawing for the same.	As per Layout drawing	
260	BOQ_57672 (BOQ 1) EOT		**1**. We have gone through the 220kV GIS Building Layout & 400kV GIS Building Layout and have found that there is a requirement of 10Ton & 12Ton. But as per your BPS it has been mentioned that there is a requirement of 10Ton and 7.5Ton. Please clarify for the same, also mention the Bay-Length /Travel length for all the required Cranes. **2.** As per your tender drawing for 200 KV GIS Building layout, No any Dimensions is mentioned. Therefore, kindly provide the dimension along with detailed EOT Technical specification.	1) As per BOQ 2) As per Layout Drawing	
261	BOQ_57672 (BOQ 1) & (BOQ 2) 220KV Bus duct	245kV, 50kA for 3 sec, SF6 Gas Insulated Bus Duct (GIB) single phase from respective GIS bay module up to SF6 to Air bushings including required other accessories for Transformer bays & line bays as per site requirement. (for both indoor and outdoor of GIS)	As per RFQ Tender BOQ (Sonapur new & sonapur Extn.), the 220KV busduct qyt. are mentioned in "lot". Kindly provide the qty in meter should be every bidder can be same plateform or else provide the AUTOCAD drawing for the same.	As per Layout drawing	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
262	BOQ_57672 (BOQ 1) T&M		As per RFQ Tender document, T&M Make & Model are missing. Kindly provide preferable MODEL & MAKE list of T&M equipments.	As per BoQ	
263	BOQ_57672 (BOQ 1) and PKH_H_Vol_II Isolator		We have gone through your technical specification and BOQ and observed two points. Kindly confirm the below. **1.** As per technical specifications type of Isolators shall be Horizontal Center Break but as per BOQ Horizontal Double Break. Kindly confirm. **2.** As per technical specifications type of Porcelain Insulators but as per BOQ Polymer Insulators. Kindly confirm.	1) As per BOQ 2) As per BoQ	
264	BOQ_57672 (BOQ 1) 220KV Termination kit	220kV Cable Termination Kit along with its structure, clamps and connectors and other accessories -16Nos.	As per RFQ BOQ, we understand that the 16Nos. 220kv termination kit is connected for Sonapur New to Sonapur Extension. Kindly confirm	Confirmed	
265	BOQ_57672 (BOQ 2) SAS Integration	SAS Integration of New Bays with existing Sub Station Automation System including License Upgradation of the existing SAS	Kindly provide preferable MODEL & MAKE of existing SAS system.	Please follow the updated BoQ	
266	BOQ_57672 (BOQ 2) CRP Panel		1. As per RFQ BOQ, the 220KV CRP Panel for line bay at extension end is not mentioned, kindly include the 220KV CRP Panel for line bay in the tender BOQ. 2. As per RFQ BOQ, Integration of 220KV Bus bar is not mentioned. Kindly include the Integration of 220KV Bus bar with Peripheral Unit at existing 220kv Sonapur Extn in the tender BOQ and also provide preferable MODEL & MAKE of existing Bus bar panel.	1) Included in BoQ 1 2) Please follow the updated BoQ	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
267	PKH_H_Vol_II Conductor		1. As per scope of work, LILO of both circuits of Karbi Langpi-Sarusajai 220kV line (Line IN portion with Single AAAC Zebra conductor and LINE OUT with HTLS Drake conductor are mentioned. However, in BOQ (220KV supply Transmission line (BOQ 4) & S. No. -11.2) ACCC Drake conductor are mentioned. Kindly confirm the exact requirement. 2. Hardware for 400KV is ASCR moose instead of drake conductor mentioned in the 220KV TL line. 3. If HTLS is there, request you to provide separate HTLS hardware include in BOQ. 4. line out erection BOQ is not available in the BPS, kindly include the same. however, In separate BOQ qty. of conductor is 20KM mentioned in supply. Where erection string of that conductor is not available, kindly include.	1)As per BoQ 2) As per S.No 13 of BoQ 4 3) As per S.No 13 of BoQ 4 4) Please follow the Updated BoQ	
268	General Isolator insulator strength (KN)		We request you to provide insulator strength (KN) of isolator for all voltage level.	66kV- Min 6KN Per Stack, 220kV and 400kV - Min 8kN Per Stack. To be decided during detail Engineering based on EDF Calculation.	
269	General Price Variation		As per the tender documents, we acknowledge that Price Variation will only be applicable for the below specified items. Any other items will not be subject to price variation also we understand PV shall be applicable on 220KV HT cable. Kindly confirm **Substation:** 1) Power Transformer 2) Conductor 3) PVC/XLPE Insulated Power Cable **Transmission Lines:**	**As per Bid**	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
			1) Fabricated Tower members (including Nut & bolts) 2) Conductor 3) Disc Insulators / Long rod Insulators.		
270	General Technical specification		**We request you to provide detailed technical specification as under:** **1.** Testing & Measurement equipment **2.** Firefighting equipment **3.** EOT Crane	3) Already provided	
271	General Equipment's Make List/Vendor list		As per RFQ Tender document, equipment's vendor list are missing. So, kindly provide the equipment's approved vendor list.	As per BoQ	
272	General AMC		We understood that the AMC will be applicable on SAS only. Kindly confirm	As per BID	
273	PKH_H_Vol_II & BOQ_57672 (BOQ 1)	Bus post insulator	As per technical specifications type of Porcelain bus post Insulators but as per BOQ Polymer Bus post Insulators, kindly confirm what we have consider in our scope.	Polymer	
274	Appendix 2 - Price Adjustment	PV formula for conductor	As per Appendix 2 - Price Adjustment, multiple price variation formula mentioned for conductor, Kindly clarify what we have consider in our scope.	As per scope of conductor	
275	General	Labour CESS	We understood that the labour CESS is applicable for Supply & erection portion. Please Confirm	Taxes will be as per prevailing Govt rules	
Civil					

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
276	PKG_H_Vol.II CHAPTER: 5 LAND DEVELOPMENT AND ASSOCIATED CIVIL WORKS	5.4 c	Kindly provide the following details for the proposed substation. 1. HFL data 2. Contour survey (if available) 3. Finished ground level of proposed substation.	Contour drawing attached and details provided in the drawing.	
277	PKG_H_Vol.II CHAPTER: 5 LAND DEVELOPMENT AND ASSOCIATED CIVIL WORKS	5.2 SOIL INVESTIGATION	In referred clause it is mentioned that "The Contractor shall use the recommendations made in the soil investigation report provided by the Employer with this bid document for reference purpose only". However, in bid document the soil investigation report is not attached. Kindly Share the Soil investigation report for the proposed station.	Soil investigation report of existing substation is attached but final design shall be based on soil investigation done after award of contract.	
278	PKG_H_Vol.II CHAPTER: 5 LAND DEVELOPMENT AND ASSOCIATED CIVIL WORKS	5.3 STANDARDS, DESIGN AND DRAWINGS. b	In referred clause it is mentioned that "All foundations shall rest below virgin ground level and the minimum depth of foundation below the virgin ground level shall be maintained." Request to kindly suggest the minimum depth of foundation to be maintained below the virgin soil. Also, If earth fill depths are high, the lightly loaded structure foundations can be rested on filled up soil after ensuring proposer compaction. Please confirm.	Minimum depth of foundation shall be 600mm. Confirmed	
279	PKG_H_Vol.II CHAPTER: 5 LAND DEVELOPMENT AND ASSOCIATED CIVIL WORKS	5.3 STANDARDS, DESIGN AND DRAWINGS (d) Other Foundations	In referred clause, it is mentioned that the following Drawings are enclosed with the tender documents, However the same is not enclosed. Kindly share the below architectural Drawings to estimate the quantum of work. 1. Firefighting pump house Building & Fire water Tank 2.Open store shed - Architectural Drawings 3.Security fencing 4.Gate 5. Cable trenches.	Drawing for 1 and 4 shall be prepared by EPC and the drawings for 2,3 and 5 has been attached.	

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280	PKG_H_Vol.II CHAPTER: 5 LAND DEVELOPMENT AND ASSOCIATED CIVIL WORKS	5.9 BUILDINGS & GENERAL REQUIREMENTS(i)Finish Schedule	We wish to inform that, the finishing schedule for control room building is given. However, finishing schedule for other buildings (i.e.: GIS Building, Store Building, Security Booth, Open store shed & FFPH) are not given in the specification/ drawing. Please furnish the same, in order to estimate the finishing quantities for the above buildings.	The finishing schedule for GIS and all switchyard buildings shall be same as Control Room Building.	
281	PKG_H_Vol.II CHAPTER: 5 LAND DEVELOPMENT AND ASSOCIATED CIVIL WORKS BOQ 56799-BoQ7	5.17 & BOQ 56799-BoQ7	As per the technical document Cl. No. 5.17, it is mentioned as "The Contractor shall be responsible for constructing approach roads, sub-station roads and service roads etc" However in price schedule, there is no separate item for approach road. We trust that, they shall be paid under item no. 21.01(6m wide road). Please confirm. If not, please include the separate item for the same in price schedule, also pls furnish the sectional drawing of the approach road.	Approach road not in scope of this bid.	
282	PKG_H_Vol.II CHAPTER: 5 LAND DEVELOPMENT AND ASSOCIATED CIVIL WORKS BOQ 56799-BoQ7	CHAPTER – 26: SPECIFICATION FOR DESIGN AND FABRICATION OF SUBSTATION STEEL STRUCTURES	It is mentioned in clause no 26.1.1 “Towers, girders and lightning masts shall be lattice type. structure fabricated from structural steel conforming to IS 2062 (latest). All equipment support structures shall be fabricated from GI pipe conforming to YST 22 or of higher grade as per IS 806 and in the clause.no 26.4.0 Design Parameters it is mentioned that " Lattice type structures are also accepted, however, AEGCL shall have the right to choose any type of structure (lattice/pipe) as per requirement during detailed engineering without any price implication". We presume that, all structures (towers/girders/ equipment support structures) for all voltage shall be lattice type. kindly confirm	Yes	
283	PKG_H_Vol.II CHAPTER: 2	2.6.5	Please mention the lead distance & specify the location for to dispose the dismantled materials.	There is no specific location for disposal in AEGCL therefore, that should be arranged by bidder at their own cost.	

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284	PKG_H_Vol.II CHAPTER: 5 LAND DEVELOPMENT AND ASSOCIATED CIVIL WORKS BOQ 56799-BoQ7	5.13 & BOQ 56799-BoQ7	As per the scope of work, the cable trench is in bidder scope. However, in price schedule, the item for cable trench is not included. Please include the same.	Revised BOQ has been uploaded.	
285	PKG_H_Vol.II CHAPTER: 2	2.6.5	It is mentioned in the referred clause, for 400kV & 220kV the Gantry structures including foundation bolts are required to be quoted per bay wise. However, in the price schedule gantry structures are paid in number basis. We trust that gantry structures will be paid in number basis not in bay wise. Please confirm.	Shall be as per BOQ.	
286	PKG_H_Vol.II CHAPTER: 5 LAND DEVELOPMENT AND ASSOCIATED CIVIL WORKS	5.3 b & d	In clause no. 5.3 b it is mentioned that, the tower and equipment foundations shall be checked for a factor of safety of 2.2 for normal condition and 1.65 for short circuit condition against sliding, overturning and pullout. The same factor shall be used as partial safety factor overloads in limit state design also. However, in clause no. 5.3 d it is mentioned that, Gantry and tower foundations shall be designed for an additional factor of safety of 1.2 for normal/ broken wire conditions and for short circuit condition. Please clarify, which factor of safety to be followed.	For checking sliding, overturning and pullout in Gantry foundation and equipment foundation factor of safety shall be greater than or equal to:- 1.65 for short circuit condition. 2.2 for normal condition.	
287	PKG_H_Vol.II CHAPTER: 5 LAND DEVELOPMENT AND ASSOCIATED CIVIL WORKS & PKG_H_Vol.II CHAPTER: 26	5.3 b	In referred clause, factor of safety for the tower and equipment foundations for normal condition and short circuit condition given. However, factor of safety for gantry structure & equipment support structure is not given. Please furnish the same.	Factor of safety for designing of Gantry foundation and Equipment foundation shall be 1.2.	

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288	PKG_H_Vol.II CHAPTER: 5 LAND DEVELOPMENT AND ASSOCIATED CIVIL WORKS	5.8	In referred clause, for boundary wall pillar to pillar distance is given as 2.5m, also it mentioned that, RCC pillar to pillar distance shall be maximum 5 mtrs along the boundary line. Please clarify the pillar-to-pillar distance. Also, please furnish the boundary wall drawing, in order to estimate the quantities.	Pillar to pillar distance shall be 2.5m. Boundary wall drawing has been submitted.	
289	PKG_H_Vol.II CHAPTER: 5 LAND DEVELOPMENT AND ASSOCIATED CIVIL WORKS	5.3 b & 5.18 a	In clause no. 5.3 b it is mentioned that, the switchyard foundations plinths and building plinths shall be minimum 900mm and 1200mm above finished ground level respectively. However, in clause no. 5.18 it is mentioned that, Minimum height of the pedestal shall not be less than 650 mm above FGL. Please clarify.	"Minimum height of the pedestal shall not be less than 650 mm above FGL exclusively where the site is located in depressed areas or low lands and the foundation has to be located in filled up soil height by 2mtrs and above."- This section of clause no. 5.18 is not applicable.	
290	PKG_H_Vol.II CHAPTER: 5 LAND DEVELOPMENT AND ASSOCIATED CIVIL WORKS	5.18 a	It is mentioned in the referred clause, If the site is located in depressed areas or in low land areas and soil filling has to be required by 2 mtrs and above, such type of sites a pile foundation shall require to adopt for all type of switchyard structures, RCC buildings and supporting structures except boundary walls and minor civil works. We trust that, equipment support structure & bus duct foundation can be rested on filled up soil after ensuring proposer compaction. Please confirm.	Confirmed	
291	Civil drawing	220kV GIS Building	220kV GIS Cum control room building attached. However, building size and room dimensions not indicated. Please furnish the drawing indicating the room sizes, in order to estimate the quantities.	Corrected drawing has been uploaded.	

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292	BOQ 56799-BoQ7	BOQ 56799-BoQ7 27.01	As per referred item of BOQ, dismantling of existing Office Building, RE Quarter, Staff Quarter, Security Barrack and Security Booth is in bidder scope. Please furnish the drawing plan for the same, to estimate the dismantling Qty.	4 no's of Assam type building along with RCC overhead water tank staging and RCC slow sand filter etc.	
293	BOQ 56799-BoQ7	BOQ 56799-BoQ7 27.01	Based on site visit we understand, existing LT Line passing in the proposed substation area. We trust removing & rerouting the same is not in bidder scope. Please confirm.	The BOQ has been revised.	
294	General		During our site survey, we have been informed by RE (AEGCL) that dismantling of existing outdoor equipment for 1 bay (220kv) adjacent to 220kv GIS Building to be done, but the same is not mentioned in Price schedule/Section Project. Kindly confirm the dismantling scope clearly and amend the price schedule accordingly.	If required AEGCL will arrange for dismantling.	
295	General		During Site survey, we have observed that 8 mtr length Culvert having 15 MT weight limitation near to the Substation approximately 2 km. We have 500MVA Transformer having heaviest Transportation weight of 260 MT in this project scope. Kindly confirm the strengthening of Culvert is in scope of AEGCL.	Yes	
296	BOQ_57672 (BOQ 7) Gates		As per RFQ Tender BOQ, the main gate & switchyard gate qty is mentioned in "RM" Kindly provide the qty in Number for gates.	BOQ Updated	
297	BOQ_57672 (BOQ 7) Dismantling work	Dismantling of existing Office Building, RE Quarter, Staff Quarter, Security Barrack and Security Booth.	Kindly confirm the type of building (RCC/PEB & Single story/ double story) & plinth area	Assam type building with RCC slow sand filter and RCC OH tank staging	
300	BOQ_57672 (BOQ 7) Dismantling work	Dismantling of existing Retaining wall and Fencing.	Kindly provide the actual distance of Retaining wall and Fencing.	200 mm (approx.)	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
301	General Route survey		We request you to provide us the route survey report for Soil Investigation.		
302	General Soil test		Kindly share the Soil test, ERT report, contour survey report with land demarcation.	Soil test report of existing sonapur GIS and contour drawing of proposed GIS has been attached. ERT report is not available.	
303	General Approach road		1. We understood that construction of approach road up to switchyard are not in the scope of bidder. if required kindly share the actual qty. 2. Kindly share the approach road drawing, if required.	Not included in scope	
304	General Drawings		**Kindly share the below section drawings:** 1. Boundary Wall(Including retaining wall) & Boundary Wall(Excluding retaining wall) 2. Open store shed 3. Switchyard Security Fencing 4. Switchyard internal road	Not available	
Mechanical					
305	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.	Split type AC units shall be provided in CRP/SAS/Communication room/Battery room. Any standard & reputed make split AC of adequate rating and design used for commercial purpose may be accepted.	
306	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.	The requirement mentioned shall be revised as 2 row deep coil for the Split Type AC units.	

SL No	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
307	General-Ventilation System GIS Hall		As per general practice we are consider 4 Air changes per hour for GIS hall ventilation system to maintain positive pressure. Please confirm. If any specific requirement to be consider for GIS hall ventilation system please provide the details.	As per the practice when ambient is 50 degree centigrade, 6 air changes per hour is followed. Positive pressure of + 5mm of water column shall be maintained in the GIS hall with exhaust fan having mechanically auto-close type louvers and pressure and temperature monitoring devices of adequate range mounted suitably therein.	
308	Vol.II, CHAPTER 6: CHAPTER 6: AIR CONDITIONING SYSTEM, Clause No. 6.3-General		We are considering only Haiwai split AC units for air conditioning system. No duct able units are being considered. Please confirm	Haiwai make or any other standard & reputed make split AC of adequate rating and design used for commercial purpose may be accepted.	
END					