MINUTES OF PREBID MEETING FOR PACKAGE I, J AND K

MINUTES OF PRE-BID MEETING (VIDEO CONFERENCE) HELD ON:	**11.06.2020**
NAME OF THE PROJECT	**ASSAM INTRA-STATE TRANSMISSION SYSTEM ENHANCEMENT PROJECTS**
FUNDING AGENCY	**ASIAN INFRASTRUTURE INVESTMENT BANK (AIIB)**
NAME OF THE WORK	**1. AUGMENTATION OF TRANSFORMATION CAPACITY AT FIVE SUBSTATIONS (NARENGI, KAHILIPARA, RANGIA, KUKURMARA & BOKO) (PACKAGE-I)** **2. AUGMENTATION OF TRANSFORMATION CAPACITY AT FOUR SUBSTATIONS (BARNAGAR, PANCHGRAM, AGIA & GAURIPUR) (PACKAGE-J)** **3. AUGMENTATION OF EXISTING TRANSFORMER CAPACITY AT VARIOUS SUBSTATIONS IN ASSAM (PACKAGE-K)**
BID NO. ICB	**AEGCL/MD/AIIB/PACKAGE-I/2020/02-I** **AEGCL/MD/AIIB/PACKAGE-I/2020/02-J** **AEGCL/MD/AIIB/PACKAGE-I/2020/02-K**

OPENING REMARKS:

Sri. P. Bora, Deputy General Manager-I, AEGCL extended a warm welcome to all the prospective bidders and introduced his team. The Deputy General Manager-I, AEGCL briefed on the components included in the concerned Package-I and explained the project's scope and further requested the prospective bidders to table their most prioritized queries, considering the bulk of queries already submitted and the limited time. The DGM-I, AEGCL assured the prospective bidders that comprehensive reply/clarifications shall be prepared and uploaded in the AEGCL site in response to their raised queries on the bid document.

NAMES OF THOSE PRESENT:

1. FROM EMPLOYER:

1. Sri. P. Bora, Deputy General Manager-I, AEGCL, O/o the MD, AEGCL, Paltanbazar, Guwahati-01.
2. Sri. S. Singha, Deputy General Manager-II, O/o the MD, AEGCL, Paltanbazar, Guwahati-01.
3. Sri. B. Bordoloi, Assistant General Manager-II, O/o the MD, AEGCL, Paltanbazar, Guwahati-01.
4. Sri. D. Chanda, Assistant General Manager-I, O/o the MD, AEGCL, Paltanbazar, Guwahati-01.
5. Smt. P. Gogoi, Deputy Manager, O/o the MD, AEGCL, Paltanbazar, Guwahati-01.
6. Sri. B. K. Dutta, Assistant Manager (P&E), AEGCL, Narengi.
7 Smt. K. Buragohain, Junior Manager, O/o the MD, AEGCL, Paltanbazar, Guwahati-01.
8. Sri. P. Darshan, Junior Manager, O/o the MD, AEGCL, Paltanbazar, Guwahati-01.
9. Sri. D. J. Baruah, E&S Safeguard Specialist.

2. FROM PROSPECTIVE BIDDERS:

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

1. J P Khetan (Managing Director), T R Sharma (Director Technical), Bhojraj (CGM), PayalKhadria (CEO) and Shantanu Dev, NECCON POWER & INFRA LIMITED, Seuni Ali, AT Road, Jorhat-785001.
2. Rupanjan Bhattacharjee, Dhirendra Kumar, Pushpraj Singh, Joydeep Chatterjee and Nirmal Dutta, GE T&D INDIA LIMITED (Formerly Alstom T&D India Limited), DLF IT Park, Plot No. 08, Major Arterial Road, Block AF, Tower C, 8th Floor, New Town (Rajarhat), Kolkata 700156 (WB).

3. Mr. Tushar Singh, Mr. Amitava Das and Mr. Sudipta Kundu, ABN Tower and Transmission Pvt Ltd., 10 A, Hospital Street, Vinayak Chambers, 2nd Floor, Office No: 206 A, Kolkata-700072

4. DebabrataBasu, Chinmoy De, Santhoshkumar V, Sougata Dutta and Ranjit Kr. Jaiswal, ABB POWER PRODUCTS & SYSTEMS INDIA LTD (APPSIL), Bengal Intelligent Park Ltd, Omega Blk EP & GP, Sector V, Salt Lake City, Kolkata, West Bengal 700091.

5. S. Ghosh, Siemens Ltd., RC-IN GP EPC TS S43, Shanti Palli, Rashbihari, Kolkata 700042

6. Vaibhav Jalan and DipamSarma, T&T Projects

7. Amit Kumar, Sudhanshu Tiwari and Dinkar Gupta, Gupta Power Infrastructures Limited

8. Mr. S. Saravanan (Project Manager) and Mr. Vipin Agrawal (Sr. Engineer), M/s KantiPrashad Mittal, 165, Gupta Colony, Transport Nagar, Meerut, Uttar Pradesh

9. Aman Bansal, Manoj Singh and Kaushik Patni, Technical Associates Ltd. Gomti Nagar, Lucknow (U.P.)

B. <u>BIDDERS THAT SUBMITTED QUERIES BUT DID NOT ATTEND THE PRE-BID MEETING:</u>

1. K. RAMACHANDRA RAO TRANSMISSION & PROJECTS PVT. LTD.,"Praveen Chambers", 305, B-Block, Kushal Towers, Khairatabad, Hyderabad – 500 004 (Telangana) India.

2. SALASAR TECHNO ENGINEERING LIMITED,Corp. Office : 2nd Floor, Plot No.33,Commercial Block, Kaushambi Ghaziabad.

3. RELIANCE ELEKTRIK WORKS, 1.Plot No.410, First Floor, Sector-1, Vaishali, Ghaziabad-201010 (U.P.)

4. Naba Kr. Sinha, WIN POWER INFRA (P) LTD., 1st Floor, Basanta Enclave, B. Baruah Road, Ullubari, Guwahati (Assam).

5. TOSHIBA T & D SYSTEMS (I) PVT. LTD., EPC Division, Regency Classic Building,3rd Floor,JayabheriEnclave,Gachibowli, Hyderabad-500 032

6. Win Power Infra (P) Ltd., Ist Floor Basanta Enclave B. Baruah Road, Ullubari, Guwahati (Assam)

7. Mr. Ajay Kohli (President – Mktg.), Mr. Praveen Kumar (Regional Manager – East) and Mr. Neeraj Mittal (Asst. General Manager) Kanohar Electricals Limited, Rithani, Delhi Road, Meerut, 250103 India

8. Sachin Kashyap, Ashoka Buildcon Ltd., S.No. 113/2, 5th Floor, Ashoka Business Enclave, Wadala Road Nashik - 422 009

9. Mr. Senthil M, Mr. Venkatachalapathy, Mr. Harimoorthy, Mr. Prashant Menon and Ms. Christina J Vidhya, BGR ENERGY SYSTEMS LIMITED, EPD Division, 7th Floor, Guna Complex No.443, Anna Salai, Teynampet, Chennai – 600018.

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

TABLE-1:

a) Queries on Bid Document (Instructions To Bidders, BDS, General Conditions, PC etc.)

Sl. No.	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
1	Section-1: Instruction to Tenderers: Eligible Tenderers:- Sr No-4.3-e:-	a Tenderer participates in more than one Tender in this Tendering process, either individually or as a partner in a Joint Venture…	Kindly clarify, whether a Bidder can participate in multiple packages like package-(I,J & K) separately.	Yes	
2	Appendix 1: Terms and Procedures of Payment:-		Kindly confirm whether our understanding related with payment terms is correct or not:- **Supply**:- **A**.10% Interest Free Advance. **B**.60% (of balance 90%) against receipt & inspection of Materials At site**.C**.50% of Balance Supply (after adjusting 10% advance & 60% payment) amount against completion of 50% Equipment erection &**D**. Remaining 50% of (after adjusting 10% advance & 60% payment) Balance Supply amount against completion of 100% Equipment ETC. **ERECTION:**- 80% against progressive Payment/RA bill & last 20% against 100% ETC of system.	Please refer to the addendum.	18,19 &20

3	Appendix 2: Price Adjustment		Kindly confirm whether Price Adjustment will be applicable for below mentioned items:- 1.Power Transformer. 2. Instrument Transformer. 3. Power & Control Cable & 4.Isolators	As per the provision of IEEMA	
4	Vol I – 4	Conflict of Interest	Can manufacture authorization be taken from the manufacture who himself is participating as bidder in these tenders? Whether a manufacturer can provide manufacturer's authorization to more than One bidder?	As per bid	
5	Vol – I Sections 4 Tender forms	Affiliate Company Guarantee	Whether it is required at the time of submission technical bid or during signing the contract if bidder becomes L1?	As per bid	
6	Vol – I	JV agreement	Whether JV agreement needs to be registered or a notary of the agreement will suffice the requirement.?	Registered	
7	Vol I	Submission of Hardcopies	Whether hardcopies of all the documents needs to be submitted ?	As per ITT31.2	
8	PKG_K_VOL _I, Section 9: Contract Forms, Appendix 1: Terms and Procedures of Payment		· **Proposed Terms of Payment are as follows:-** **Supply:-** -10% of the contract price as advance shall be released along with LOA upon submission of advance bank guarantee. -80% of the contract value shall be released on pro-rata basis as per agreed billing schedule/breakup through irrevocable letter of credit within 21 days after dispatch of particular equipment's with 100% of the taxes and duties on submission of documentary evidence. -10% will be paid against successful completion of the commissioning of the switchyard at site and against submission of PBG valid up to the defect liability period . In the case of delay in completion of PAC, for reasons not attributable to APPSIL, 10% of the contract price (for supply portion) shall be released 60 days after scheduled commissioning of the switchyard.	Please refer to the addendum	18,19 & 20

9			**Erection Civil, Testing & Commissioning:-** -10% of the contract price as advance shall be released along with LOA upon submission of advance bank guarantee. -80% of the contract value shall be released on pro-rata basis against our running bills through irrevocable letter of credit within 21 days with 100% of the taxes and duties on submission of documentary evidence -10% will be paid against successful completion of the commissioning of the switchyard at site and against submission of PBG valid up to the defect liability period . In the case of delay in completion of PAC, for reasons not attributable to APPSIL, 10% of the contract price (for supply portion) shall be released 90 days after scheduled commissioning of the switchyard.		
10	ITB, 3.1, Page-5	Prohibited Practices	Kindly share Prohibited practices policy	Please go through AIIBs official website https://www.aiib.org/en/policies-strategies/operational-policies/prohibited-practices.html	

11	ITB, 3.1(vii) and 3.2 Page-5 and 6	Tenderers, suppliers and contractors to permit AIIB or its representative to inspect their accounts and records and other documents relating to the Tender submission and contract performance and to have them audited by auditors appointed by AIIB.	Right to Inspect, subject to prior notice of atleast 7 days to be given by the AIIB or its representative before such inspection. Please accept	No Change	
12	ITB, 7.2, Page:9	The Tenderer is advised to visit and examine the site where the plant is to be installed and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the Tender and entering into a contract for the provision of plant and services. The costs of visiting the site shall be at the Tenderer's own expense	In the present scenario, in case we are not able to make a site visit, we will mention in the Tender Document that the site visit is yet to take place and the quotations and revised queries/addendum may be submitted after the Site Visit.	Not acceptable	
13	Section 4: Tender Forms, Manufacturer's Authorization, Page-82	We hereby confirm that the necessary spares and service for equipment/materials/accessories shall be available for the period for 10 years from the date of commissioning of substation	Obligation to supply necessary spares and services shall be only till warranty period and not afterwards. Please accept	As per bid	

14	Section 7 General Condition of Contract Clause 6, Page-132	AIIB's Policy on Prohibited Practices (2016, as amended to date) requires Borrowers (including and all other beneficiaries of the Bank financing), as well as Tenderers, Suppliers, and Contractors, concessionaires and consultants under AIIB-financed contracts, observe the highest standard of transparency and integrity during the procurement, execution and implementation of such contracts.	We are not aware of AIIB's Policy. Kindly share	Please go through AIIBs official website https://www.aiib.org/en/policies-strategies/operational-policies/prohibited-practices.html	
15	Section 7 General Condition of Contract 7.2, page-134	The Contractor shall, unless specifically excluded in the Contract, perform all such work and/or supply all such items and materials not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Completion of the Facilities as if such work and/or items and materials were expressly mentioned in the Contract.	Contractor shall only be liable to perform works and supply as per the Specifications mentioned in the Contract Documents. Please confirm	**No change**	
16	Section 7 General Condition of Contract 9.8 (d), page-136	The Contractor shall develop and seek AEGCL and AIIB's approval for the implementation of a multi-tiered Grievance Redress Mechanism (GRM) which will accept and seek to resolve any complaints brought by PAPs, Contractors or Subcontractors. The GRM	If complaints accountable to Contractor's obligations, the same shall be dealt accordingly by the contractor. Please confirm	Accepted/CONFIRMED	

		operation shall be widely publicized in Project area, free to access and transparent.			
17	GCC-16.5, Page-141	The provisions of this GC Clause 16 shall survive termination, for whatever reason, of the Contract.	The provisions of this GC Clause 16 shall survive 3 years from termination, for whatever reason, of the Contract. Please clarify our understanding	The provision of clause no.16 shall remain in force until the both parties i.e. employer and contractor agreed upon	
18	GCC-21.3, Page-148	The Contractor shall at its own risk and expense transport all the materials and the Contractor's Equipment to the Site by the mode of transport that the Contractor judges most suitable under all the circumstances.	As per ITT 18.4 (b), Plant Supplied from Within the Employer's Country, shall be quoted on an EXW Incoterm basis (ex works, ex-factory, ex warehouse, ex showroom, as applicable). Therefore, these clauses are contradictory and Risk Transfer shall be Ex-Works. Risk for the Existing Transformers shall be of the Employer and Contractor shall not be responsible for any loss/damage arising out of the existing transformers/Facilities.	No change. (Please refer GCC Clause no. 34 and Appendix 3:Insurance Requirements of the Section 9 Contract Form)	
19	GCC-27.8, Page-162	If the Facilities or any part thereof cannot be used by reason of such defect and/or making good of such defect, the Defect Liability Period of the Facilities or such part, as the case may be, shall be extended by a period equal to the period during which the Facilities or such part cannot be used by the Employer because of any of the aforesaid reasons	The cumulative Defect Liability Period for such repaired or replaced parts shall not exceed 24 months from the date of the start of the Original Warranty Period. Please confirm	Please refer to section 8, SC clause no. 27 for defect liability period	

20	GCC-27.9	Except as provided in GC Clauses 27 and 33, the Contractor shall be under no liability whatsoever and howsoever arising, and whether under the Contract or at law, in respect of defects in the Facilities or any part thereof, the Plant, design or engineering or work executed that appear after Completion of the Facilities or any part thereof, except where such defects are the result of the gross negligence, fraud, or criminal or willful action of the Contractor	Contractor shall be under no liability whatsoever and howsoever arising, and whether under the Contract or at law, in respect of defects in the Facilities or any part thereof, the Plant, design or engineering or work executed that appear after Completion of the Facilities or any part thereof. (Comment: Contractor shall have no liability whatsoever after completion of Defect liability Period.) Please confirm	Yes. Provision applied up to Defect Liability Period or extended defeat liability (if applicable).	
21	GCC-29.1		The Contractor shall not indemnify against the claims of Intellectual Property as regards the sale of the products produced by the Facilities in any country. The same is not owned by the Contractor and therefore cannot be held accountable for the said intellectual property.	No Change. Contractor have to take the responsibility for any IP issue	
22	GCC-30.1, Page-165		DELETE: "Except in cases of criminal negligence or wilful misconduct"	No Change. If the loss to the employer is because of the wilful misconduct or negligence of the contractor, responsibility will be held upon him.	
23	GCC-31, page-165		The title of ownership of the Goods shall transfer after the Supplier has received the payment of 100% of the agreed price for the Goods.	No Change. As long as the contractor receives full payment from the employer for the completed job the title of ownership of the Goods shall not be transferred	

24	GCC-33.1, page-167		The Contractor shall indemnify the Employer against any third-party claims, legal action or administrative proceedings that might be directed against the Purchaser by a third party alleging the existence of the infringement of a patent, design, trademark, copyright or any other existing intellectual property right, relating to the Goods and/or Services. To this end, the Supplier shall indemnify the Purchaser for any consequences (including damages, costs and expenditure of any nature, comprising related attorneys' costs and fees) for which it may be made liable.	No Change	
25	GCC-37		Add: The Parties are aware of the outbreak of a Coronavirus (commonly known as COVID-19) or any mutation of such virus which is or may impact normal business and execution of this Contract. The Parties agree that Contractor is entitled to cost compensation, time extension, or other reasonably required contract adjustments, if any consequences whether directly or indirectly resulting out of, or in connection with the coronavirus outbreak, lead to delays in delivery of goods or provision of services or otherwise affect Contractor's contractual obligations or duties.	To be discussed whether can be incorporated in Force Majure Clause.	
26	SCC-7.3	The Contractor agrees to supply spare parts for a period of years: Ten (10) Years	Obligation to supply necessary spares and services shall be only till warranty period and not afterwards.	No change. The clause meant that the spare parts shall have to be available in the market for 10 years	
27	SCC-8.1	The Contractor shall commence work on the Facilities within 28 days from the Effective Date for determining Time for Completion as specified in the Contract Agreement.	We understand that the hinderance free Site to commence the works will be handed-over to the Contractor within 28 days from the date effective date. Please confirm	Yes.	

28	SCC-9.1, Page-200		Employer shall be responsible for all environmental risks and shall indemnify the Contractor against any claims on account of Environmental Losses.	No such provision mentioned in the referred clause.	
29	SCC-11.2 page-200		We understand that the Price shall be firm and shall not be adjusted for the Contract scope of works until original duration of the Project. However, in case of any delay in the Project beyond six months from original duration of the Contract (duration specified in the Contract document) for reasons not attributable to Contractor, then the prices shall be mutually agreed for any impacts faced by the Contractor.	No. Price is adjustable and its applicable from the base date to the date of inspection/offered in case of Supply and date of Joint Measurement in case of Erection. The price variation will be applicable during contractual delivery period only. No price adjustment shall be allowed for the period of delay for which the supplier is responsible; however, any decrease in the price variation during delayed period shall be applicable. Please refer Section 9, Appendix-2 for more information.	
30	SCC-13.3.3	The performance security shall be reduced to ten percent (10%) of the value of the component covered by the extended defect liability to cover the Contractor's extended defect liability in accordance with the provision in the PC, pursuant to GC Sub-Clause 27.10.	We understand the performance security for 5% submitted by Contractor during DLP shall be released by Employer immediately after the completion of DLP of the facility and submission of separate performance security by Contractor for any extended defect liability (if applicable) pursuant to GC subclause 27.10. Please confirm	Not acceptable	

31	SCC-27		The Contractor shall be under no liability including any Liquidated Damages or Penalty (if any) whatsoever and howsoever arising, and whether under the Contract or at law, in respect of defects in the Facilities/Works or any part thereof, the Plant, design or engineering or work executed that appear after Defect Liability Period.	Accepted after defect liability or extended defect liability period is over.	
32	Contract Agreement Forms - Article 1 Contracr Document- Clause-1.1, Page-212	(j) Any other documents shall be added here7	We understand that the pre-bid & post-bid clarifications (if any) shall also be a part of the Contract Documents and will be included in this section. Please confirm	Yes. Minutes of the Pre bid meeting/addendum if necessary, shall be the part of Bid document. If any amendment to be done after post bid that will be the part of Bid document.	
33	Contract Agreement Forms - Article 3, Effective Date Clause 3.1, Page-213	The Effective Date upon which the period until the Time for Completion of the Facilities shall be counted from is the date when all of the following conditions have been fulfilled: (a) This Contract Agreement has been duly executed for and on behalf of the Employer and the Contractor. (b) The Contractor has submitted to the Employer the performance security and the advance payment guarantee. (c) The Employer has paid the Contractor the advance payment. (d) The Contractor has been advised that the documentary credit	We request to include the following condition for Effective Date : (e) The Employer has handed-over the hinderance free site to the Contractor	No	

		referred to in Article 2.2 above has been issued in its favor.			
34	Contract Agreement Forms ,Appendix 1: Terms and Procedures of Payment;(A) Terms of Payment, Page 216	The advance will be adjusted at the rate of 25% of the advance amount from each subsequent bill till the complete amount of advance is adjust. The advance payment security may be reduced in proportion to the value of the plant and mandatory spare parts delivered to the site, as evidenced by delivery documents.	We request adjustment of advance at the rate of 10% from each subsequent bill till the complete advance amount is adjusted. Please confirm	Please refer to the addendum	18, 19 & 20
35	SCC-Time for Commencement and Completion-Clause-8.2, Page-199	The Time for Completion of the whole of the Facilities shall be 24 (Twenty-Four) months from the Effective Date as described in the Contract Agreement.	Though the whole of the Facilities shall be completed within 24 months, we understand Substation wise Completion, Operational Acceptance/Taking-over, DLP Commencement shall be allowed by the Employer in this Project. Please confirm.	Each Substations under the package shall have to be completed within 24 month and separate completion and operational acceptance certificate shall be issued by concern Project Manager	
36	GCC-25.2 Guarantee Test, Page-158		Guarantee Tests are not applicable for this tender however Commissioning/Charging of the Substation shall be considered in place of Guarantee Tests. Please confirm	Yes, however they shall have to be submit Guarantee Certificate for the equipment.	
37	GCC,Defect Liability clause-27.8, Page-163	If the Facilities or any part thereof cannot be used by reason of such defect and/or making good of such defect, the Defect Liability Period of the Facilities or such part, as the case may be, shall be extended by a period equal to the period during which the Facilities or such part cannot be used	We propose to include that the aggregate extended defect liability period under this clause shall not exceed the 24 months from the date of original date of commencement of Defect Liability Period for such repaired/replaced equipment/works. Please confirm acceptance.	As per Bid	

		by the Employer because of any of the aforesaid reasons.			
38	General		Kindly confirm Storage space at site, space of Contractor's office, Water and electricity for construction will be provided by Employer to Contractor free of cost.	Storage place shall be provided. But contractor shall make arrangement for their office on its own.	
39	General		Please confirm if any statutory approval/compliance, specific for the Project, needs to be obtained by the Project Owner such as environmental clearance etc., If Yes, are such approvals in place/ will be in place at the time of award of Contract. Please clarify	Responsibilities of the contractor for Environmental Compliance are mentioned in ESMP as Annexure in the bid. Requirement of Statutory Environmental approval for Augmentation of these existing facilities not observed yet, if any issues arises during execution will be resolve by AEGCL.	
40	Time Extension Request		K Ramachandra Rao Transmission & Projects Pvt Ltd is a EPC Contracting Business Enterprise which has executed 765KV Transmission Projects for PGCIL on turnkey basis besides executing EHV Substation Projects. We have already downloaded the Tender documents & are extremely keen to bid for your above package. However due to ongoing CORNOA VIRUS lockdown in India, we are unable to even attend the scheduled Pre Bid Meeting on 11th May 2020. We expect the Lockdown conditions to prevail till end of May 2020 & accordingly approach you to extend the Pre bid meeting by 4weeks.	Already done	

41	PKG_I,J,K_VOL_I/Section-1/Point No.4.3	**Conflict of Interest**	As per Pre-Bid discussions Dated: 11.06.2020, we understand that If a Transformer manufacturer is participating as a Bidder/JV Partner then it cannot provide Manufacturer Authorisation to any other bidder. However, this clause is restricted only for Power Transformer and not for other equipment like Circuit Breaker etc. Please confirm.	As per bid. It will applicable for all the equipments.	
42			JV agreement format is not given in the Tender documents. Please provide the same	No specific format.	
43	Clause B (Progressive Payment for Supply Items) under Appendix-1,	Terms and Procedures of Payment forming part of Section-9 (Contract Forms).	Kindly confirm that the supply payment will be made within 60 days from the date of submission of invoice against supply.	Yes	
44	Clause B (Progressive Payment for Supply Items) and Clause A (Progressive Payment for Erection items) under Appendix-1,	Terms and Procedures of Payment forming part of Section-9 (Contract Forms).	The subject clause limits the number of bills to be raised by the contractor to twenty (20) for supply items and ten (10) bills for erection. Further, the clause mentions that the first progressive bill for erection is to be raised post the completion of 10% of the erection activities and the last 20% of the progressive payment for erection shall be released post the successful completion of the complete project. We request you to kindly allow the contractor to raise atleast one bill each month for supply and erection / installation separately in line with general practices adopted by all utilities in India. Further, we request you to kindly remove the10% cap for raising the first progressive erection bill and also request you to kindly consider blocking only last 5% of the progressive payment of erection against completion of the project. The pending 15% payment will be paid along with the progressive payment. Kindly confirm.	Please refer to the addendum.	19

45	Clause 6 (Taxes & Duties) under Section 9 (Contract Forms)	Octroi / Entry tax and sale-in-transit etc.	We request you to kindly replace the clause with applicable GST clauses.	As per applicable Taxes and duties of Law of the land.	
46	Vol I	Price Adjustment	Is the Price adjustment applies for the Power Transformer and other equipment?	As per IEEMA provision.	
47	PKG_K_VOL _I, Taxes and Duties, Pages.140, GCC.14		Do we need to have GST taxes extra as the current GST scenario. Please clarify	GST first to paid by the EPC and thereafter it will BE reimbursed by AEGCL	
48	PKG_K_VOL _I, Taxes and Duties, Pages.140, GCC.14		In reference of Scope of work , its consider all activities right from Drawings to deliveries, erecting , commissioning , its performance etc. We (APPSIL) however will go for item wise/ HSN wise GST rate of supply items to customer in case of supply . For Erection/Commissioning etc. we will charge GST @ 18% FIXED . Please accept	Accepted	
49	PKG_K_VOL _I, Taxes and Duties, Pages.140, GCC.14		Applicable HSN/ SAC code will be change as per the interpretation of the terms of the scope of work. Any issues for the same shall not be linked with the invoice payments. Please confirm	Accepted	
50	PKG_K_VOL _I, Taxes and Duties, Pages.140, GCC.14		Any changes in exchange GST rates, duties and taxes should be adjusted accordingly as these are beyond the control of bidders and changes as per government regulations time to time. Please clarify our understanding	Accepted	
51	PKG_K_VOL _I, Taxes and Duties, Pages.140, GCC.14		AEGCL shall, however deduct such taxes at source as per the rules and issue Tax Deducted at Source (TDS) Certificate to the bidder as per prevailing tax laws applicable to the contract.	TDS Certificate shall be provided by AEGCL	

52	PKG_K_VOL _I, Taxes and Duties, Pages.140, GCC.14		Kindly confirm 1% BOCW will be deducted by Employer on Total Contract Value OR on the Service portion of the Contract. Please clarify our understanding	1% BOCW will be deducted by Employer on Total Contract Value	
53	PKG_K_VOL _I, Taxes and Duties, Pages.140, GCC.14		Required Customer valid GSTIN details will be needed before getting the amendment order. Please clarify	GSTIN details will be shared.	
54	PKG_K_VOL _I, Taxes and Duties, Pages.140, GCC.14		Kindly clarify whether AEGCL will issue three separate Contract for Supply; Civil and Erection & Commissioning for the Turnkey Project.	No, Contract will be same for supply, erection and commissioning	
55	PKG_K_VOL _I, Taxes and Duties, Pages.140, GCC.14		GST - Classification of Contract – Please confirmation for the classification of Contract i.e. – Works Contract or Individual Supply contract.	This is turnkey contract	
56	Time Extension Request		K Ramachandra Rao Transmission & Projects Pvt Ltd is a EPC Contracting Business Enterprise which has executed 765KV Transmission Projects for PGCIL on turnkey basis besides executing EHV Substation Projects. We have already downloaded the Tender documents & are extremely keen to bid for your above package. However due to ongoing CORNOA VIRUS lockdown in India, we are unable to even attend the scheduled Pre Bid Meeting on 11th May 2020. We expect the Lockdown conditions to prevail till end of May 2020 & accordingly approach you to extend the Pre bid meeting by 4weeks.	Already done	

b) Queries on Qualification Requirement

Sl. No.	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
1	2.4.2 a) under Experience in key activities of Section 3: Evaluation and Qualification Criteria	The Bidder or if the Bidder is not a manufacturer must have designed, manufactured, type tested, supplied at least twenty (20) Power transformers of 132kV or higher voltage class and of capacity of at least 50MVA and more, which are in successful operation for at least five(5) years as on the date of Bid opening. The Bidder should furnish a list of such works executed along with Client's Performance Certificates to substantiate the requirement of this clause.	Kindly clarify that if the bidder is not a manufacturer, then he can participate in the tender as a Lead Partner of the Joint Venture with any manufacturer who fulfils the said qualification requirement	Please refer to the addendum	9, 11
2	2.5, Manufacturers/Subcontractor of Section 3: Evaluation and Qualification Criteria	Subcontractors/manufacturers for the listed major items of supply must meet the requirements mentioned either in clause 2.5.1 or 2.5.2. ----------	Kindly clarify that can Power Transformer be supplied from the manufacturer other than bidder.	Yes	
3			So considering the Covid-19 situation you are requested to extend the date of pre bid meeting by 10 days.	Already done	

4	2.4.1 (Contracts of similar size and nature) under Section-3, Evaluation and Qualification Criteria	"experience as a contractor / Partner in JV / Manufacturer in Erection, Testing and Commissioning of Power Transformers and Auto Transformers of 220 kV and /or above for at least last five (5) years prior to the bid submission date."	We understand that any bidder who has the experience (either as a contractor OR as a partner in JV OR as a manufacturer) of supply, erection, testing and commissioning of Power Transformers or Auto Transformers of 220 kV and / or above during the last five (5) years prior to the bid submission date is qualified. Kindly confirm our understanding is correct.	Please refer to the addendum	8,10
5	2.4.2(a) (Experience in Key Activities) under Section-3, Evaluation and Qualification Criteria.	"The Bidder or if the Bidder is not a manufacturer must have designed, manufactured, type tested, supplied at least ten (10) Auto/ Power transformers of 220kV or higher voltage class and of capacity of at least 50MVA and more, which are in successful operation for at least five(5) years as on the date of Bid opening	We understand in case the bidder is not a manufacturer of Auto / Power Transformers and sources the same from other Original Equipment Manufacturers', then such OEMs of Auto / Power Transformers shall meet the above clause. Kindly confirm our understanding is correct.	Yes	
6	Clause 2.4.2(b) (Experience in Key Activities) under Section-3, Evaluation and Qualification Criteria	"the subcontracting works shall not exceed 30% of the total contract value."	We understand that this limitation is for Civil and Erection activities to be performed at site and not applicable for supply/sourcing of equipment/materials. Kindly confirm our understanding is correct.	AS per Bid	
7	Table B under clause 2.4.2(b) (Experience in Key Activities) under Section – 3, Evaluation and Qualification Criteria	Minimum experience in few activities	No activities are mentioned in the table. Kindly clarify.	As per bid	

8	Clause 2.5.2 and Clause 2.5.2 (i) falling under Section 3	Evaluation and Qualification criteria, wherein the bidders are stipulated to submit the Manufacturers Authorisation for the various products.	We understand that one Original equipment manufacturer of Auto / Power Transformer or any other substation equipment can support multiple bidders through Manufacturer Authorisation. Kindly confirm our understanding is correct.	As per bid	
9	Clause 2.5.2 and Clause 2.5.2 (i) falling under Section 3 Evaluation and Qualification criteria.		We understand that an Original Equipment manufacturer of Auto / Power Transformer and other substation equipment can submit a bid directly to AEGCL and also support other bidders for various other products that they are manufacturing through Manufacturers Authorisation. Kindly confirm our understanding is correct.	As per bid.	
10	2.3.2	Minimum average annual turnover of Rs. 56 core (Fifty Six Crore) calculated as total certified payments received for contracts in progress or\completed, within the last three (3) years.	All Partners: Must meet requirement Combined Each Partner: Not Applicable One Partner (Lead Partner): must meet 35% of the requirement	Please refer to the addendum.	12, 14, 16
11	2.3.3	For Joint Ventures: (1) Lead Partner must demonstrate that its financial resources defined in FIN-3, less its financial obligations for its own current contract commitments defined in FIN-4, meet a minimum share of 60% of the total requirement for the Subject Contract. AND	All Partners: Must meet requirement Combined Each Partner: Not Applicable One Partner (Lead Partner): Not Applicable	Please refer to the addendum	13, 15 & 17
12		(2) Each partner must demonstrate that its financial resources defined in FIN-3, less its financial obligations for its own current contract commitments defined in FIN-4, meet a minimum share of 40% of the total requirement for the Subject Contract. AND	All Partners: Must meet requirement Combined Each Partner: Not Applicable One Partner (Lead Partner): Not Applicable	Please refer to the addendum	13, 15 & 17

13	2.4.1	1.Experience as a contractor/Partner in a JV /Manufacturer in Erection, Testing and commissioning of Power Transformers of 132kV and/or above for at least three (3) years prior to the Bid submission deadline	All Partners: Must meet requirement Combined Each Partner: Not Applicable One Partner (Lead Partner): Not Applicable	Please refer to the addendum	8, 10
14	2.4.2	The Bidder or if the Bidder is not a manufacturer must have designed, manufactured, type tested, supplied at least twenty (20) Power transformers of 132kV or higher voltage class and of capacity of at least 40MVA and more, which are in successful operation for at least five(5) years as on the date of Bid opening. The Bidder should furnish a list of such works executed along with Client's Performance Certificates to substantiate the requirement of this clause. Must meet requirement	All Partners: Must meet requirement Combined Each Partner: Must meet requirement One Partner (Lead Partner): Must meet requirement	Please refer to the addendum	9, 11
15	Vol I – 2.4.2	The Bidder or if the Bidder is not a manufacturer must have designed, manufactured, type tested, supplied at least twenty (20) Power transformers of 132kV or higher voltage class and of capacity of at least 50MVA and more, which are in successful operation for at least five(5) years as on the date of Bid opening. The Bidder should furnish a list of such works executed along with Client's Performance Certificates to substantiate the requirement of this clause.	Please Clarify for attaining this clause the bibber of the partner of the JV should possess this experience or this can be achieved by submitting the manufacturer authorization from the transformer supplier who has this experience.	Manufacturer authorization is sufficient.	

16	Vol I – 2.4.2	The Bidder or if the Bidder is not a manufacturer must have designed, manufactured, type tested, supplied at least ten (10)Auto/ Power transformers of 220kV or higher voltage class and of capacity of at least 50MVA and more, which are in successful operation for at least five(5) years as on the date of Bid opening. The Bidder should furnish a list of such works executed along with Client's Performance Certificates to substantiate the requirement of this clause	We suggest that package I & J has transformers of capacity 50 MVA 132/33kV and 160 MVA 220/132kV Auto. The qualification calls for experience for 220kV Transformers only. Since, 132kV Transformers are also required in the package, we request to bifurcate manufacturing experience for 132kV and 220kV Separately for both the transformer ratings required.	Please refer to the addendum	9
17	Vol I – 2.4.2	The Bidder or if the Bidder is not a manufacturer must have designed, manufactured, type tested, supplied at least ten (10)Auto/ Power transformers of 220kV or higher voltage class and of capacity of at least 50MVA and more, which are in successful operation for at least Five(5) years as on the date of Bid opening. The Bidder should furnish a list of such works executed along with Client's Performance Certificates to substantiate the requirement of this clause	Please clarify for attaining this clause the bidder or the partner of the JV should possess this experience or this can be achieved by submitting the manufacturer authorization from the transformer supplier who has this experience.	MA is sufficient	
18	Section 3 ,Volume 1,Cl 2.4.2	The Bidder or if the Bidder is not a manufacturer must have designed, manufactured, type tested, supplied at least twenty (20) Power transformers of 132kV or higher voltage class and of capacity of at least 50MVA and more, which are in successful operation for at least five(5) years as on the date of Bid opening. The Bidder should furnish a list of such works executed along with Client's Performance Certificates to substantiate the requirement of this clause.	Pursuant to the pre-bid meeting, we understand that for the purpose of meeting the particular criteria for design, type test and supply of 132 KV 20 nos PTR, it shall suffice to give Manufacturer authorization from OEM who is meeting the above criteria.	Yes	

19	Section 3 ,Volume 1,Cl 2.4.1	Experience as a contractor/Partner in a JV /Manufacturer in Erection, Testing and commissioning of Power Transformers of 132kV and/or above for at least last five (5) years prior to the Bid submission deadline.	We understand that the experience required is of Erection, Testing and commissioning of Power Transformers during the last 5 years prior to the Bid submission deadline. Kindly confirm. As per standard practice, additionally you may ask for successful operation of 2 years.	Please refer to the addendum	8 & 10
20	General		If a manufacturer is participating in the bid directly, can MAF be given to any other bidder? Kindly confirm. If a manufacturer is not participating directly in the bid, can MAF be given to more than one bidder? Kindly confirm.	As per bid.	
21	PKG_I,J,K_VOL_I/Section-3/Point No.2.4	**2.4.1 Contracts of Similar Size and Nature** 1.Experience as a contractor/Partner in a JV /Manufacturer in Erection, Testing and commissioning of Power Transformers and Auto Transformers of 220kV and/or above for at least last five(5) years prior to the Bid submission deadline .	As per Pre bid discussions Dated: 11.06.2020, we understand that if bidder is not a manufacturer of Power Transformer, the bidder/contractor can participate with Manufacturer Authorization Form (MAF) from qualified transformer manufacturers as per Clause No. 2.4.2. and Joint Venture is not required with transformer manufacturer. Please confirm.	Yes	

22	PKG_I,J,K_VOL_I/Section-3/Point No.2.5	**2.4.2 Experience in Key Activities** The Bidder or if the Bidder is not a manufacturer must have designed, manufactured, type tested, supplied at least ten (10) Auto/ Power transformers of 220kV or higher voltage class and of capacity of at least 50MVA and more, which are in successful operation for at least five(5) years as on the date of Bid opening. The Bidder should furnish a list of such works executed along with Client's Performance Certificates to substantiate the requirement of this clause.	As per Pre bid discussions Dated: 11.06.2020, we understand that if bidder is not a manufacturer of Power Transformer, the bidder/contractor can participate with Manufacturer Authorization Form(MAF) from qualified transformer manufacturers as per Clause No. 2.4.2. and Joint Venture is not required with transformer manufacturer. Please confirm.	Yes	
23			Please clarify that if we are an EPC contractor and not a transformer manufacturer then, can we submit MAF (in place of JV agreement) and credential of our associated transformer manufacturers for qualifying clause no. 2.4.2 (a) of qualification and evaluation criteria. Also, can a transformer manufacturer give MAF to multiple EPC contractors for the same package?	Yes	
24	Tender Documents Qualifying Criteria	Must must have designed, manufactured, type tested, supplied at least (10) Auto/Power Transformers 220 kV or higher voltage class and of capacity of at least 50 MVA and more, which are in successful operation for at least five (5) years as on the bid opening	Must must have designed, manufactured, type tested, supplied at least (10) Auto/Power Transformers 220 kV or higher voltage class and of capacity of at least 50 MVA and more, which are in successful operation for at least two (2) years as on the bid opening	Not acceptable.	

25			Due to increased lock down by Govt. of India up to 31st May, 2020, unable to visit AEGCL for discussion on various points on projects and also unable to survey the work sites. Hence, requested to extend the pre-bid meeting and tender submission dates.	Already extended.	

c)<u>Queries on Technical Specifications</u>

Sl. No.	Clause No./ Section/ Page No.	Description	Queries	Response	Reference to Sl. No. of Addendum [Table 2] wherever applicable
1	Scope of Work :- general		Kindly clarify, whether 1.1Kv Power & Control cables to be replaced for equipment which will remain AS-IT-IS ? like in 220 kV & 132kv Side, we are not replacing CBs in Transformer bays. So for that CBs do we need to change cable?	Approx. quantity has been specified in BOQ. Changes shall have to be done as per site requirement.	
2	Scope of Work :- general		Kindly confirm whether we have to supply Clamp connectors for all the new supplied equipment or not.	Yes	

3	Equipmenmt dismantling/Replacement		Please confirm we need to replacement/dismantling & Shifting of existing Current transformer, Isolator & CRP. If yes please add line item in BOQ also share location of store.	Yes dismantling & Shifting of existing Power Transformer, Current Transformer, Isolator and other necessary item is required. For quoting against dismantling necessary row will be added and please follow the updated BOQ.	
4	132/33 kV Narengi Sub-Station.		2x50 MVA 132/33 kV Transformer in place of existing 2x25 MVA, 132/33 kV Transformers. We do not find any line item for dismantling & shifting of existing Transformer. Kindly confirm whether dismantling & shifting of transformer in GE scope or not.	Dismantling is required. And necessary item will be added in the BOQ.	
5	132/33 kV Kahilipara Sub-Station		3x50 MVA 132/33 kV Transformer in place of existing 1x31.5+2x30MVA,132/33 kV Transformer. We do not find any line item for dismantling & shifting of existing Transformer. Kindly confirm whether dismantling & shifting of transformer in GE scope or not.	Dismantling is required. And necessary item will be added in the BOQ.	
6	132/33 kV Rangia Sub-Station		2x50 MVA 132/33 kV Transformer in place of existing 2x25 MVA, 132/33 kV Transformers. We do not find any line item for dismantling & shifting of existing Transformer. Kindly confirm whether dismantling & shifting of transformer in GE scope or not.	Dismantling is required. And necessary item will be added in the BOQ.	

7	400 kV Kukurmara Sub-Station		2x50 MVA 132/33 kV Transformer in place of existing 1x25+1x16 MVA,132/33 kV Transformers. We do not find any line item for dismantling & shifting of existing Transformer. Kindly confirm whether dismantling & shifting of transformer in GE scope or not.	Dismantling is required. And necessary item will be added in the BOQ.	
8	220/132 kV Boko Sub-Station		1x160 MVA 220/132 kV Transformer in place of existing 1x50 MVA,132/33 kV Transformers. We do not find any line item for dismantling & shifting of existing Transformer. Kindly confirm whether dismantling & shifting of transformer in GE scope or not.	Dismantling is required. And necessary item will be added in the BOQ.	
9	Scope of Work :- general		Please confirm the Healthiness of existing cable trench, whether repairing of trench is required (like repairing of angle trays) if yes please provide :-Size and depth of trench, No. of angle trays or existing Trench section layout.	The healthiness of the cable trench has to established by the bidder by field visit and accordingly the decision whether to repair them or not will be taken during detail engineering. Reference drawings for types of trench have been attached.	
10	132/33 kV Dibrugarh Sub-Station.		2x50 MVA 132/33 kV Transformer in place of existing 2x31.5 MVA, 132/33 kV Transformers. We do not find any line item for dismantling & shifting of existing Transformer. Kindly confirm whether dismantling	Dismantling is required. And necessary item will be added in the BOQ.	

			& shifting of transformer in GE scope or not.		
11	132/33 kV Depota Sub-Station		2x50 MVA 132/33 kV Transformer in place of existing 2x31.5 MVA, 132/33 kV Transformers. We do not find any line item for dismantling & shifting of existing Transformer. Kindly confirm whether dismantling & shifting of transformer in GE scope or not.	Dismantling is required. And necessary item will be added in the BOQ.	
12	132/33 kV Golaghat Sub-Station		2x50 MVA 132/33 kV Transformer in place of existing 2x25 MVA, 132/33 kV Transformers. We do not find any line item for dismantling & shifting of existing Transformer. Kindly confirm whether dismantling & shifting of transformer in GE scope or not.	Dismantling is required. And necessary item will be added in the BOQ.	
13	132/33kV Shankardevnagar Sub-Station		2x50 MVA 132/33 kV Transformer in place of existing 2x25 MVA, 132/33 kV Transformers. We do not find any line item for dismantling & shifting of existing Transformer. Kindly confirm whether dismantling & shifting of transformer in GE scope or not.	Dismantling is required. And necessary item will be added in the BOQ.	
14	132/33 kV Moran Sub-Station		2x50 MVA 132/33 kV Transformer in place of existing 1x25+1x16 MVA 132/33 kV Transformers. We do not find any line item for dismantling & shifting of existing Transformer. Kindly	Dismantling is required. And necessary item will be added in the BOQ.	

			confirm whether dismantling & shifting of transformer in GE scope or not.		
15	Civil works		Kindly share Soil investigation report & type of soil of each substation.	AEGCL will share during detail Engineering	
16	Civil works		Kindly share mark-up of proposed area on existing electrical/foundation layout for all sites.	Bidders are requested to visit each substation and kindly produced necessary drawing if any modification is required which will be approved by AEGCL during detailed Engineering.	
17	Civil works		kindly share existing cable trench layout for all sites.	Bidders are requested to visit each substation and kindly produced necessary drawing if any modification is required which will be approved by AEGCL during detail Engineering.	
18	Civil works		Requirement of new gantries at all sites. Please clarify.	Required as per site condition.	
19	Civil works		Provide cable trench section type D details.	Will share the drawing of Cable trench type D	
20	Civil works		We understand that grade of concrete shall be M15. Please confirm.	M20 for switchyard structure.	
21	Civil works		We understand that FOS for support structures shall be 2.0 and 1.5 for NC and short circuit condition respectively. Please confirm.	As per relevant Standard.	
22	Civil works		We understand galvanization thickness for switchyard steel structure shall be 610gm/sqm for all sites. Please confirm.	Accepted.	

23	Civil works		We understand that wind pressure to be considered for switchyard structures is 793N/sqm for all sites. Please confirm.	Accepted	
24	Civil works		We understand that wind calculation and design of members shall be as per IS 802 part1/sec 1 1995 and IS 802 part1/sec 2 1992 respectively. Please confirm.	As per relevant standard.	
25	Civil works		We understand that gravel shall be spread over compacted earth for yard development. Please confim.	Please refer to the modified BOQ.	
26	General		We request you to please provide us the approved Make/ Vendor List to be folllowed for the Contract.	AEGCL doesn't have any vendor list. The same shall be finalised during detail engineering.	
27	General		Due to the ongoing lockdown and travel restrictions in India on account of Covid 19, we are unable to visit site and carry out assessment of the site conditions. Our pre-bid queries are based on our review of the tender documents. In view of same, we are requesting you to please provide contact details of Existing Substations, so that we can coordinate with them for collection of necessary inputs.	Please refer to Annexure: A for contact details and substations DC voltage.	
28	PKG_K_VOL_II, Type Test Report, Clause No.1.18.4		We request for acceptance of type tests conducted on equipment with similar or higher rating within the last 10 years as on date of bid opening.	Not Acceptable. As per BID	

			Please confirm our request.		
29	PKG_K_VOL_II, Recommended Spare, Clause No.1.19.1		To maintain parity between the bidders, we request that the cost of recommended spares is not considered during bid evaluation. Please confirm our request.	Will be considered during evaluation.	
30	CEIG/CEA Approval		We understand that all necessary permissions from the statutory authorities/ local bodies applicable for the said work shall be arranged by the Employer. Please confirm our understanding.	Not Acceptable	
31			Furthermore, we would request you to extend pe-bid meeting and bid submission date by one month under present precarious status in the country due to COVID-19 impact	Already done	
32	section - 4 - Technical specification for Power transformer 4.10.4	While the bidders may offer their own design, the maximum limit of losses which include tolerance, but Standard Fixed Losses for Transformers and Shunt Reactors as per Central Electricity Authority (CEA) letter CEA/PSE&TD/218/3056-4028 dated 01.03.19 shall be as below:	As per CEA guidelines for 50MVA, 132/33 kV transformer LL shall be 125 kW I2R - 105 kW Stray+Eddy - 20 kW Aux L-3 KW and NLl - 25 kW. Letter copy attached	Accepted. It should be as per CEA guidelines. Please refer to the Addendum	1

		For 50MVA, 132kV : No Load Loss (kW) - 25kW Load Loss (kW) - 95 kW I2R (kW) - 76kW Stray + Eddy (kW) - 20 kW Aux. Loss - 3kW			
33	section - 4 - Technical specification for Power transformer 4.28	Technical Parameters for 50MVA Power transformer - 1.9 - HV- LV impedance- Max. tap - 10.3% Rat tap - 12.5% Min tap - 15.4%	Technical Parameters for 50MVA Power transformer - 1.9 - Please allow IS tolerance on HV- LV impedance as below Max. tap - 10.3% +/- 15% Rat tap - 12.5% +/- 10% Min tap - 15.4% +/- 15%	As per bid	
34	section - 4 - Technical specification for Power transformer 4.28	Technical Parameters for 160MVA Auto transformer - 1.9 - HV- IV impedance- Max. tap - 10.3% Rat tap - 12.5% Min tap - 15.4%	Technical Parameters for 160MVA Power transformer - 1.9 - Please allow IS tolerance on HV- IV impedance as below Max. tap - 10.3% +/- 15% Rat tap - 12.5% +/- 10% Min tap - 15.4% +/- 15%	As per Bid	

35	As per 1_TECH_SPEC_TFR 17.4.0. (ii)	Bidder should have successfully carried out Dynamic Short Circuit test on three phase bank of similar or higher MVA transformer.	As per our understanding bidder should only possess the Dynamic SC Test report for similar or higher MVA Trf against the tendered rating to meet the subjected requirement, please confirm	We will accept dynamic short circuit test report of similar or higher rating transformer. Report should not be older than 5 years. Test report of higher class/rating of Transformer are acceptable with commitment to perform the type test free of any charge on the supplied Transformer after the award of contract.	
36	As per 1_TECH_SPEC_TFR 17.9.1.3	The manufacturer shall provide all necessary information and calculations to demonstrate that the transformer meets the requirements for short circuit strength and durability. The latest recommendations of IEC and CIGRE SC 12 shall be applied for short circuit withstand evaluation	Kindly note, IEC &Cigre SC 12 are adopting different methods/calculations for ascertaining SC withstand capability of the design. So it will make the design review process complicated which will lead to confusion. As PGCIL is following design review as per CIGRE SC 12 which is well accepted, we would request you to SC withstand capability should be proven as per CIGRE SC 12 guidelines being adopted by PGCIL	The bidder may follow IEC or CIGRE SC 12 guidelines for ascertaining SC withstand capability of the design of transformer.	
37	As per 1_TECH_SPEC_TFR 17.3.1.2	Parallel operation of transformer	Transformer shall run in parallel with the existing transformer only if the impedance, vector group, tap range, OLTC connection shall be as per the technical parameters mentioned In	For parallel operation necessary data should match the other existing Transformer in the substation. All related data shall be furnished during detail	

			Annexure - A 4.0 and Annexure - A 3.0	engineering.	
38	As per 1_TECH_SPEC_TFR 17.40.0	Transformer connected to GIS	Clarify whether these transformers are connected to GIS.	The specified clause is not in the BID document of package I,J & K.	
39	As per 1_TECH_SPEC_TFR 17.14.0	Bushings	Clarify whether bushings above 52 kV class are OIP or RIP Bushings. Both requirements are mentioned in the specification.	As per Bid Clause 4.17.0	
40	As per 1_TECH_SPEC_TFR 17.14.0	BCT Length - Mentioned as 600mm in case of accommodating 2 CTs.	BCT Length shall depend on the height of the CTs and shall be decided by the bidder during detailed engineering stage, please confirm	Accepted	
42	As per 1_TECH_SPEC_TFR 17.15.1.0	Cooling equipment for radiator bank. In case of separately mounted radiator bank it is mentioned that the banks shall be placed on the either side of the transformer tank.	Please consider the arrangement of Cooling banks is planned based on the clearance requirements of Substations and accessories (like cable box and Bushing clearance etc.,) Hence, the same to be as per design choice and we propose for both the radiator banks on the one side.	It should be decided as per site condition and will be clarify during detail engineering.	
43	section - 4 - Technical specification for Power transformer 4.1.0	(g) Details of substation where augmentation of transformers will be carried out.	In no case shall the foundation of the existing transformers will be matched to the present designs.	The foundation of existing Transformer may be required as per site condition	
44		Cables	Cables from transformer accessories to marshalling box shall be in manufacturers scope. All other cables in sub station shall not be in	It is included in the scope of the successful bidder.	

			manufacturers scope.		
45	section - 4 - Technical specification for Power transformer 4.21.3	Qty of Digital RTCC relays	One number Digital RTCC relay shall be considered per Transformer. No Spare Digital RTCC relay shall be considered. Please confirm	Yes	
46	Section - 4 - Technical specification for Power transformer 4.12.7	All transformer and reactor tanks should generally be of conventional type.	160MVA & 50 MVA transformer shall be of Bell and bottom tank construction.	Transformer Tank shall be Convectional type.	
47			As per Clause 10.1.14.2.2) Relays shall have one no. front RJ45 or USB port for Local Relay Parameterization and Two nos. rear FO port/ Rear RS485 for connectivity to SAS over IEC61850 protocol. Please confirm if front RS232 port and rear one FO and one RJ45 port shall be acceptable for all IEDs.	Apart from all other ports, two nos. rear FO port will be required for connectivity to SAS over IEC61850 protocol. The two FO ports is required for PRP architecture.	
48			As per Clause 10.1.14.2.2) Relays shall have redundant power supply card i.e. in case of failure of one source fail, the redundant shall pick up instantly. Power supply card failure shall generate necessary alarm to local SCADA. Please confirm if Relays (Protection and Control) with Single power supply card shall be acceptable.	Accepted	

49			As per Clause 10.1.23) Relays for Buscoupler: 1. 01 nos. relay for phase fault and 01 no. for Earth fault 2. Bus Differential Protection. Please confirm if composite OC, EF relay (01 nos) shall be acceptable for 33kV Buscoupler bay. Also, in case of Bus Differential Protection, please confirm the no. of bays to be covered and type of Busbar Differential (Lo Imp/Hi Imp, Centralised/De-centralised) to be considered against the same.	Bus differential not required. However, Buscoupler panel should be integrated to the existing SAS.	
50	Erection BOQ Sl.8.09, 220KV (3 nos for Agia GSS)		Kindly mention name of structure	For LA.	
51	Erection BOQ Sl.8.010, 132 kV(6 nos for Barnagar GSS, 6 Nos. for Gauripur GSS, 6 for Panchgram and 3 for Agia GSS)		Kindly mention name of structure	As mentioned in the BOQ	
52	Erection BOQ Sl.8.010, 33 kV(6 nos for Barnagar GSS, 6 Nos. for Gauripur GSS, 6 for Panchgram GSS)		Kindly mention name of structure	As mentioned in the BOQ	

53	Technical Specification Vol II (Power Transformer)	Guaranteed losses – In this case AEGCL has specified following maximum losses for 50 MVA 132/33kV Power Transformers :- i. No Load loss - 25 KW ii. Load loss - 95 KW iii.Auxiliary loss - 3KW	As per CEA guidelines for standardisation of transformers dated 23.08.2019 the recommended losses for 50 MVA 132/33kV Power Transformers are as shown below:- i. No Load loss – 25 KW ii. Load loss- 125 KW iii. Auxiliary loss – 3KW Above losses are also in line with losses specified by other boards for their requirement of 50 MVA 132/33kV transformers. Drastic reduction in load loss will substantially increase the cost of transformer and therefore we suggest losses in line with the recommendation of CEA may be incorporated in the specification. The relevant portion of the CEA recommendation is attached.	Losses will as be capitalized as per formula given in Section AA of CBIP Manual on Transformers, 2013 (Pubication No 137). Please refer to the Addendum	1
54	Technical Specification Vol II (Power Transformer)	Impedance Pattern: As per AEGCL specification lower impedance of 10.3% should be at maximum voltage tap position and higher impedance of 15.4% should be at minimum voltage tap position.	In the case of 50 MVA,132/33 KV transformers being procured by other SEB's maximum impedance (13%) is at maximum voltage tap and minimum impedance (11.5%) is at minimum tap. Thus, the maximum and minimum impedances are in the reverse order in AEGCL specification which calls for special design for tap winding and increase the cost of transformer. Hence, we suggest accepting maximum impedance of 13% at	As per Bid documents.	

			maximum tap and minimum impedance of 11.5% at minimum tap in line with the specification of other Boards.		
55	Section-4, 4.27.0 SYSTEM DATA		Fault level for HV and LV ; mentioned in cl 4.28.0 (A) Technical parameters sub cl. .14 for 50 MVA rating is different than mentioned values in cl 4.27.0- Please clarify	System fault level HV: 40kA & LV: 31.5 kA. That is as per 4.28.0 (A)	
56	Section-4,4.28.0 (A) TECHNICAL PARAMETERS FOR 50 MVA POWER TRANSFORMER cl 1.14 (iii)		Switching Impulse withstand Voltage is not applicable for 132 kV voltage level-Please confirm	It is applicable for 132kV Voltage level	
57	Section-4, 4.28.0 (A) TECHNICAL PARAMETERS FOR 50 MVA POWER TRANSFORMER cl 1.22		Flux density at **rated voltage** and rated frequency shall be 1.6 Tesla as per cl 4.13.7 against mentioned at **"System voltage"** .	Yes	

58	Section-4, 4.28.0 (A) TECHNICAL PARAMETERS FOR 50 MVA POWER TRANSFORMER cl 1.22		TYPE TEST REPORTS for all brought out items shall be furnished during detail engg	YES. But applicable for brought out item only.	
59	Section-4, SECTION - 4 cl 4.9.0. b) cl 1.18.4		With regard to Validity of Dynamic short circuit test clause 1.6.6 & 1.6.7 are not available -Please furnish the same Also further note that Identical transformer test reports for type test and short ckt test are not available. We will give higher rating (MVA & kV) test report We will not offer short ckt test for offered transformer. Also, we will not prove similarity criteria as per IEC 76-5 for offered transformer and the given test report. - Please confirm	We will accept dynamic short circuit test report of similar or higher rating transformer. Report should not be older than 5 years. Test report of higher class/rating of Transformer are acceptable with commitment to perform the type test free of any charge on the supplied Transformer after the award of contract.	
60	Section-4, SECTION - 4 cl 4.10.3, cl 4.10.4		Losses will be capitalized ? or it is maximum values ? Further customer /end customer to note that the given load loss is very very low. Please review and confirm the same with base MVA - Further also it is mentioned I2R (kW) = 76 kW, Stray + Eddy (kW) =20 KW then	Losses will as capitalized as per formula given in Section AA of CBIP Manual on Transformers, 2013 (Pubication No 137). Please refer to the Addendum Sl no: 1.	

			load loss shall be 96 kW against 95 kW-Please clarify & also clarify the base MVA for the same		
61	Section-4, SECTION - 4 cl 4.13.2.		We do not have in house core cutting facility. Core cutting is done at APPSIL approved vendors only	Not Acceptable	
62	Section-4, SECTION - 4 cl 4.21.2.3		In this clause it is mentioned that " The FOS (Fibre Optic Sensors) requirement is however tentative only" - Please confirm whether it is required or not?	Required.	
63	Section-4, SECTION - 4 cl 4.21.3.2		If Parallel with any existing transformer is required please give existing transformer details (Existing trafo. Rating plate/ Measured Impedance at various taps eg Max voltage tap/ Normal vol. tap, Minimum volt. Tap / AVR / OLTC schematics)	The same will be provided during detailed Engineering	
64	Section-4,SECTION - 4 cl 4.21.3.2		As per this clause " all Digital RTCC Relays shall be of same make for smooth integration for parallel operations of all transformers in the substation. " If any specific AVR make and model is required than please give the details	It should be of reputed manufacturer and will be clarify during detail engineering.	

65	Section-4, 4.26.5. Stage Inspection b) v) 4.38.0. Schedule - 3 cl 3.1.2		No load loss measurement by providing dummy coils during Core coil assembly stage : Our manufacturing plant was set up as per latest manufacturing facilities of APPSIL plants in Europe and hence our core stacking table and hydraulic lifting jigs were designed similar to the ones available in Europe. In Europe after the introduction of accurate computer software programs for estimating the no load losses, preliminary core loss measurements are not done and hence this stacking table is also designed such that the core is assembled and erected without the top yoke. With our core table also we cannot assemble the core with top yoke and hence we are not in a position to do preliminary core loss measurement by winding the dummy turns on the limbs. As we are using the proven and time-tested software of APPSIL for estimating the no load losses we are confident of getting no load losses within the guaranteed limits. We build the core as per APSSIL worldwide practice and standards and our principals do not recommend to build the core with top yoke lamination as double handling of top yoke lamination may introduce	During Factory Acceptance test the no load loss shall be measured and recorded in presence of AEGCL personnel.	

			stress in laminations, negatively affecting the magnetic properties of core. Similarly, the accuracy of measurements will not be good as the dummy coils will not simulate actual conditions of windings. We once again confirm that actual no load losses will be as per guaranteed value which may be checked during final testing. "No load measurement by providing dummy coils shall not be carried out".		
66	PKG_K_VOL_II	Drawings & SLD	Kindly share drawings & SLD of all 5 substations.	Please refer to the Annexure A	
67	PKG_K_VOL_II	Live area / Live working condition	Please clarify whether we need to work under any live condition during augmentation of new 50MVA transformer with existing transformer	Yes	
68	PKG_K_VOL_II	Project work progress	Kindly clarify do we need to work parallelly in all 5 substations at a time or we need work by completing one substation later go on to next substation.	Work may be carried out parallelly	
69	Price schedule_BOQ_26487, Erection_pkg k, SL no 15.01	Personal protective equipment's (Hard hats (with full/partial brims as necessary) Safety glasses with side shields. Face	Please provide specific qty of each item to be procured at each substation.	The requirement of this item may be fixed during detail engineering.	

		masks/shields. Suitable footwear (safety/steel-toed boots, rated dielectric footwear) Insulating gloves (rated, used along with leather/cloth linings for shock protection)) as per site requirement			
70	Price schedule_BOQ_26487, Erection_pkg k, SL no 15.02	SF6 retrieving arrangement as per site requirement	Request to elaborate exact requirement of this line item & requirement is for all 5 Location .Also clarify whether we need to procure any SF6 gas handling equipment.	It will be required for HGIS only.	
71	Price schedule_BOQ_26487, Erection_pkg k, SL no 15.03	Wire insulation/ Bird Deflectors/ Bird Flapper as per requirement including installation	Please provide specific qty of each item to be procured at each substation.	The requirement of this item may be fixed during detail engineering.	
72	Type test report	Type test reports for isolators shall be valid with in 5 years	We would request to accept type test validity of isolators with in 10 years	Not Acceptable	
73	PKG_K_VOL_II	Instruments transformer shall be live tank	We request to accept deadtank CT without bellow	Not Acceptable	
74	General		Existing 132kV Control and relay panels shall be used for new 50MVA transformer and only integration cables are in present scope. Please confirm.	Yes	
75	General		We presume that all the ground earth mats are already available and only risers are	If required earth mat shall be constructed.	

			to be connected from ground mat. Please confirm.		
76	General		No Lightning protection are in present scope of works. Please confirm	Yes	
77	General		No illumination is in present scope of works. Please confirm.	Yes	
78	BOQ, Clause-2 Supply	Supply of Control & Relay Panel for 33KV Bus Coupler Panel : 33 kV Bus Coupler Panel (1 no for Dibrugarh GSS, 1 no for Depota GSS, 1 no for Golaghat GSS, 1 for Shankardevnagar GSS and 1 for Moran GSS)	We understand, scope includes only supply of 33kV buscoupler control and relay panels for (1 no for Dibrugarh GSS, 1 no for Depota GSS, 1 no for Golaghat GSS, 1 for Shankardevnagar GSS and 1 for Moran GSS)	Supply, erection & Commissioning	
79	General	Supply of Control & Relay Panel for 33KV Bus Coupler Panel :	Kindly share the protection single line diagram	Please refer to Annexure A.	
80	General	Integartion with existing SAS	Do we need to integrate NEW supply of 33kV Bus coupler control and relay panels with existing SAS. If yes, kindly share the existing SAS details along with architecture diagrams. (Applicable for all 5 substation)	Please refer to Annexure A.	

81	PKG-K_VOL_II	Tender documents calls for AUGMENTATION OF THE EXISTING TRANSFORMER CAPACITY AT VARIOUS SUB-STATIONS IN ASSAM (PACKAGE K).	Is the scope includes augmentation / supply of NEW 132/33kV Transformer / Line control & relay panel also. If yes, kindly share the following details, 1. Existing Make and model details. 2. Existing single line diagram / Architecture. 3. Existing schematic drawings. 4. Control room layout. 5. Existing Photos 6. Existing wiring scheme 7. Existing panel sizing	Supply of New 132kV Transformer Panel is not in this scope.	
82	PKG-K_VOL_II, Clause-10.1.1.5, Page-122	The bidder is to dismantle the existing Relay & Control Panels and to erect, commission new panels in bay wise. The bidder will be provided day time shutdown (from 8.00 am to 4.00 pm) and during the period of shutdown the bidder is to dismantle the panel and commissioned the new panel. Initially, the control operations are to be	We assume that, NEW panels mentioned in spec is for supply of 33kV buscoupler control and relay panels as mentioned in BOQ. Kindly confirm Kindly share the make and model details of SAS along with architecture and schematic diagrams.	Yes	

		performed through respective BCU only. Once all the Control & Relay Panels are commissioned, the Bidder is to commission SAS.			
83	PKG-K_VOL_II, Clause-10.1.23, Page-133	A. 33 kV Bus Coupler Panel (b) Bus differential protection: The bus bar protection relays shall be provided.	Is the NEW supplied 33KV bus coupler panel need to integration with existing busbar protection panel. If yes, kindly share the existing make, model, schematic diagrams.	There is no busbar protection in 33kV system. But it needs to be integrated to existing SAS.	
84	PKG-K_VOL_II, Clause-10.1.27 : TECHNICAL DATA SHEET FOR THE RELAY AND CONTROL PANELS : 33 kV Bus Coupler / Bypass Breaker Panel , Page-135	33 kV Bus Coupler / Bypass Breaker Panel	As per Spec, LBB will be offered as part of BCU. Metering, Control / status indications will be through BCU. Please clarify	LBB can be part of BCU or Overcurrent relay. Metering, control/Status can be through BCU	
85	Section-4, Technical specification of power transformer	4.27.0 SYSTEM DATA	Fault level for HV and LV ; mentioned in cl 4.28.0 (A) Technical parameters sub cl. .14 for 50 MVA rating is different than mentioned values in cl 4.27.0- Please clarify	System fault level HV: 40kA & LV: 31.5 kA. That is as per 4.28.0 (A)	

86	Section-4, Technical specification of power transformer	4.28.0 (A)TECHNICAL PARAMETERS FOR 50 MVA POWER TRANSFORMER cl 1.14 (iii)	Switching Impulse withstand Voltage is not applicable for 132 kV voltage level-Please confirm	It is applicable for 132kV Voltage level	
87	Section-4, Technical specification of power transformer	4.28.0 (A)TECHNICAL PARAMETERS FOR 50 MVA POWER TRANSFORMER cl 1.22	Flux density at rated voltage and rated frequency shall be 1.6 Tesla as per cl 4.13.7 against mentioned at "System voltage" .	Yes	
88	Section-4, Technical specification of power transformer	4.28.0 (A)TECHNICAL PARAMETERS FOR 50 MVA POWER TRANSFORMER cl 1.22	TYPE TEST REPORTS for all brought out items shall be furnished during detail engg	YES. But applicable for brought out item only.	
89	Section-4, Technical specification of power transformer	SECTION - 4 cl 4.9.0. b) cl 1.18.4	With regard to Validity of Dynamic short circuit test clause 1.6.6 & 1.6.7 are not available -Please furnish the same Also further note that Identical transformer test reports for type test and short ckt test are not available. We will give higher rating (MVA & kV) test report We will not offer short ckt test for offered transformer. Also, we will not prove similarity criteria as per IEC 76-5 for offered transformer and the given test report. - Please confirm	We will accept dynamic short circuit test report of similar or higher rating transformer. Report should not be older than 5 years. Test report of higher class/rating of Transformer are acceptable with commitment to perform the type test free of any charge on the supplied Transformer after the award of contract.	

90	Section-4, Technical specification of power transformer	SECTION - 4 cl 4.10.3, cl 4.10.4	Losses will be capitalized ? or it is maximum values ? Further customer /end customer to note that the given load loss is very low. Please review and confirm the same with base MVA - Further also it is mentioned I2R (kW) = 76 kW, Stray + Eddy (kW) =20 KW then load loss shall be 96 kW against 95 kW-Please clarify & also clarify the base MVA for the same	Losses will as capitalized as per formula given in Section AA of CBIP Manual on Transformers, 2013 (Pubication No 137). Please refer to the Addendum	1
91	Section-4, Technical specification of power transformer	SECTION - 4 cl 4.13.2.	We do not have in house core cutting facility. Core cutting is done at APPSIL approved vendors only	Not Acceptable	
92	Section-4, Technical specification of power transformer	SECTION - 4 cl 4.17.25	In this clause it is mentioned that " The FOS (Fibre Optic Sensors) requirement is however tentative only" -Please confirm whether it is required or not?	Required.	
93	Section-4, Technical specification of power transformer	SECTION - 4 cl 4.21.2.3	If Parallel with any existing transformer is required please give existing transformer details (Existing trafo. Rating plate/ Measured Impedance at various taps eg Max voltage tap/ Normal vol. tap, Minimum volt. Tap / AVR / OLTC schematics)	The same will be provided during detailed Engineering	
94	Section-4, Technical specification of power transformer	SECTION - 4 cl 4.21.3.2	As per this clause " all Digital RTCC Relays shall be of same make for smooth integration for parallel operations of all transformers	It should be of reputed manufacturer and will be clarify during detail engineering.	

			in the substation. " If any specific AVR make and model is required than please give the details		
95	Section-4, Technical specification of power transformer	4.26.5. Stage Inspection b) v) 4.38.0. Schedule - 3 cl 3.1.2	No load loss measurement by providing dummy coils during Core coil assembly stage : Our manufacturing plant was set up as per latest manufacturing facilities of APPSIL plants in Europe and hence our core stacking table and hydraulic lifting jigs were designed similar to the ones available in Europe. In Europe after the introduction of accurate computer software programs for estimating the no load losses, preliminary core loss measurements are not done and hence this stacking table is also designed such that the core is assembled and erected without the top yoke. With our core table also we can not assemble the core with top yoke and hence we are not in a position to do preliminary core loss measurement by winding the dummy turns on the limbs. As we are using the proven and time-tested software of APPSIL for estimating the no load losses we are confident of getting no load losses within the guaranteed limits. We build the core as per APSSIL worldwide practice	During Factory Acceptance test the no load loss shall be measured and recorded in presence of AEGCL personnel.	

			and standards and our principals do not recommend to build the core with top yoke lamination as double handling of top yoke lamination may introduce stress in laminations, negatively affecting the magnetic properties of core. Similarly, the accuracy of measurements will not be good as the dummy coils will not simulate actual conditions of windings. We once again confirm that actual no load losses will be as per guaranteed value which may be checked during final testing. "No load measurement by providing dummy coils shall not be carried out".		
96	(VOLUME -2) (Technical Specifications), Clause No: 1.17.3, Page No:7 of 203	If desired by the Employer, the Contractor shall also carry out type tests as per applicable Standards for which Employer shall bear the expenses except in cases where such tests have to be carried out in pursuance to Clause 1.18.3.	Our offered product is type tested as per relevant IEC that is 62271-205. Since there is no change in design, we do not envisage any repition of type test certificate.	If there is no design change than an undertaking has to be submitted by the bidder confirming there is no design changes in last 5 years from the date of bid opening.	

97	(VOLUME -2) (Technical Specifications), Clause: 1.18.2, Page No:7	(a) Tests are conducted in an independent and well-known testing laboratory, or (b) 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 clients or purchaser.	Some test of the offered modules are conducted at manufacturers test Lab that is ABB Italy and is witnessed by known accredited testing 'agency such as ACAE and CESI. These bodies are certified to witness Type test according to IEC procedures. Request to accept the TTRs based on same.	The type test report can be accepted, if tests are carried out in an internationally or nationally accredited laboratories. If there is no design change than an undertaking has to be submitted by the bidder confirming there is no design changes in last 5 years from the date of bid opening.	
98	(VOLUME -2) (Technical Specifications) Clause No: 1.18.4, Page No:8	1.18.4 Type Test Reports older than five (5) years on the date of Technical bid opening shall not be accepted.	Our offered module has been type tested as per applicable IEC that is 62271-205 for Hybrid switchgear and there is no change in design thereafter. Request you to accept Type test reports valid within 10 years. Same is accepted by various utilities such as GETCO, MSETCL, PGCIL, KPTCL etc.	The type test report can be accepted, if tests are carried out in an internationally or nationally accredited laboratories. If there is no design change than an undertaking has to be submitted by the bidder confirming there is no design changes in last 5 years from the date of bid opening.	

99	(VOLUME -2) (Technical Specifications), Clause No: 9.1.0, Page No: 119	For all control/protection/ instrumentation purposes PVC insulated armoured control cables of minimum 2.5 sq. mm Size with stranded Copper conductors shall be used.	For Hybrid switchgear as per manufacture standard shall be offered as below which is suffice to meet AEGCL requirement and accepted in every major utilities such as PGCIL, GETCO, MSETCL etc. Cables between Modules and LCC shall be shielded cables. Cables/wire inside LCC shall be 1.1kV PVC FRLS type. Cables for CT shall be 4sqmm and for control circuit shall be 1.5 sq mm. and for motor circuits it shall be 2.5 sqmm.	The same will be finalised during detailed Engineering.	
100	(VOLUME -2) (Technical Specifications)., Clause No: 11.2.1, Page No:139	34. Support structure shall be hot dip galvanised according to DIN 50976 and Zinc of purity not less than 99.95% shall be used, Zinc shall conform to IS 209/1979 or its latest revisions.	DIN 50976 is now absolute and ISO 1461 is followed for hot dip galvanising. Zinc coating shall be 610 gm/M2 as standard and same shall be suffice the requirement.	The same will be finalised during detailed Engineering.	
101	(VOLUME -2) (Technical Specifications), Clause No: 11.4.1, Page No:140	GUARANTEED TECHNICAL PARTICULARS	Request to confirm the Control & Motor voltage. Whether it is 110V DC or 220V DC. Further request to confirm AC auxiliary source voltage. Whether it is 230V AC?	Shall be provided.	
102	(VOLUME -2) (Technical Specifications),Clause No: 11.8.1, Page No:142	The steel structure will be made of hot dip galvanized steel.	DIN 50976 is now absolute and ISO 1461 is followed for hot dip galvanising. Zinc coating shall be 610 gm/M2 as standard and same shall be suffice the requirement.	The same will be finalised during detailed Engineering.	

103	(VOLUME -2) (Technical Specifications)	CT specification	Request to confirm CT specification details that will be installed din Hybrid GIS	AEGCL will provide during detail engineering	
104	Volume-1,25. Commissioning and Operational Acceptance, Page No: 202	25.2.2 The Guarantee Test of the Facilities shall be successfully completed within 30 (thirty) days from the date of Completion.	Bidder envisaged that Functional guarantee test is not applicable for Hybrid GIS as it is normally applicable for Transformer. However necessary commissioning test applicable as per IEC/Technical specification of HGIS. shall be performed on Hybrid switchgear	As per Bid documents.	
105	PKG_I,J,K_VOL_II/Clause No.1.9.0	DRAWINGS AND DOCUMENTS FOR APPROVAL	Please accept only soft copy (pdf) for approvals. Hard copies shall be submitted after approval for site purpose. Please accept the same for faster engineering completion.	Not Accepted. Hard copy shall be submitted	
106	PKG_I,J,K_VOL_II/Clause No.2.4.0	2.4.0 CABLE TRENCHES AND CABLE TRAYS	Please accept angle supports in cable trenches in place of Cable Trays as per standard practices in Switchyard/substations. Please confirm.	Not Accepted.	
107	PKG_I,J,K_VOL_II/Clause No.2.4.0	**2.4.0 CABLE TRENCHES AND CABLE TRAYS** 2.4.2 Cable Trays (ii). Finished Cable Trays shall have a standard width of 300 mm.	We presume that maximum width of Cable Trays shall 300mm. In case during detailed engineering higher size tray is required, AEGCL will provide suitable variation. Please Confirm.		
108			We request you to please provide drawings of various type of cable trench sections (Type-D etc).	Will be uploaded	

109	PKG_I,J,K_VOL_II/Clause No.2.8.0	2.8.0 ELECTRICAL CLEARANCES	We understand that Phase to Earth Clearance mentioned as 2400mm seems on higher side, it is 2100mm as per relevant IS standards. Please accept values as per IS.	As per Bid documents.	
110	PKG_I,J,K_VOL_II/Clause No.2.12.3.2	2.12.3.2. Post Insulators	As per standards Power Frequency withstand Voltage for 33/36kV system is 70kVrms . Please Confirm.	As per Bid documents.	
111	PKG_I,J,K_VOL_II/Clause No.4.7.1	4.7.1 Bidders should have successfully carried out Dynamic Short Circuit Test on any rating of 132kV or above class transformer as on the date of NIT and shall enclose the relevant Test Report and Certificate along with bid. In case bidder has not successfully tested 132kV or above class transformer for Dynamic Short Circuit Test, their bid shall be considered technically non-responsive. This shall be applicable for 132kV class Transformer of all rating. Further design review of	We understand that Dynamic short Circuit Test Report of 132kV or higher voltage rating transformer of any vector group, any losses shall be acceptable. Please confirm.	Not acceptable. Dynamic short circuit test shall be carried out on same vector group transformer and the losses shall be as per bid.	

		offered 132 kV class transformers shall be carried out based on design of short circuit tested 132 kV or above voltage class transformer.			
112	PKG_I,J,K_VOL_II/Clause No.4.28.0	4.27.0 SYSTEM DATA	Creepage distance for 220/132/33kV is mentioned as 7595/4495/1116mm, while it is mentioned 6125/3625/900mm in clause 4.27.0 and several other places. Hence, please confirm to accept 6125/3625/900mm.	Creepage distance for 220/132/33kV shall be as 7595/4495/1116mm.	21
113	PKG_I,J,K_VOL_II/Clause No.4.28.0	4.28.0(B) TECHNICAL PARAMETERS FOR 160 MVA Auto-Transformer	Please confirm that OFAF or ODAF design for 160MVA shall be selected during detailed engineering by manufacturer.	Type of cooling shall be as per bid. Further design shall be decided during detailed engineering.	
114	PKG_I,J,K_VOL_II/Clause No.5.1.12	5.1.12 TECHNICAL DATA SHEET FOR CURRENT TRANSFORMER	We understand that No. of CT cores are less in Data Sheet w.r.t. BOQ. Please accept the same in line with specification as detailed technical values are given in specification. Please confirm.	Please refer to the Addendum	3
115	PKG_I,J,K_VOL_II/Clause No.5.1.12	5.1.12 TECHNICAL DATA SHEET FOR CURRENT TRANSFORMER	We understand that mentioned Knee Point Voltage is for highest tapping of CTs. Please Confirm.	Confirmed	
116	PKG_I,J,K_VOL_II/Section-7	SECTION-7 TECHNICAL SPECIFICATION OF ISOLATORS	We understand that same specification shall be applicable for 220kV Isolators also. Please Confirm.	Please refer to the Addendum	2

117			Also please confirm that insulators for isolators are included in Isolator Price.	Included	
118	PKG_I,J,K_VOL_II/Section-10	10.1.0 Technical Specifications for Control & Relay Panels	We presume that Busbar Protection scheme shall not be applicable for 33kV C&R Panels. Please Confirm.	Not Applicable	
119	General		Since site survey is not practically possible due to COVID Pandemic it is requested to please furnish SLD and Layouts of Existing Substations for better clarity.	SLD of all sub - stations & Layout of seven no. Sub - station shall be provided.	
120	General		Please furnish Soil Report data of Existing Substations for better clarity	Soil report data shall be given during detailed engineering.	
121	General		We understand that Control & Relay Panels for Power Transformers / Auto Transformers etc. are not included in these packages. Please confirm.	Confirmed	
122	General		We understand that our scope is limited upto C&R Panels and RTCC Panels. Their integration with existing SCADA system is not in our scope. Hence no hardware/software like LAN Switches/Ethernet Switches/FO Cables/Patch Cables/Connectors/Laptop/Workstations etc. shall not be in our scope. Please confirm.	Integration of 33kV Bus Coupler/Sectionlizer CRP with existing SAS is within the scope of the bidder.	
123	General		Please furnish the civil foundation drawings of Substation equipment(LA, CT, PT, Isolator, Breaker, Transformer etc.).	Shall be provided. During detailed engineering	

124	General		Please furnish the structure drawing of Substation equipment(LA, CT, PT, Isolator, Gantry etc.).	Shall be provided. During detailed engineering	
125	General		Please provide contact details of the concerned person so that any minor clarifications or doubts may be sought after.	Will be provided.	
126			Requested for all the approved drawings	Drawings shall be prepared and submitted by the bidder for approval from AEGCL	
127			approved vendor list is not given in the Tender documents. Please provide the same	AEGCL does not have any approved vendor list. Bidders shall offer products from reputed vendors for approval from AEGCL	
128			In the BOQ of each package," Supply_Pkg I, & Relay Panel for 33KV Bus Coupler Panel" 220kV & 132kV given in BOQ. Kindly clarify		
129			Technical Specifications of Conductor is not provided in the tender documents. Please provide the same	Please refer to the addendum	4

130	section - 4 - Technical specification for Power transformer, 4.10.4	While the bidders may offer their own design, the maximum limit of losses which include tolerance, but Standard Fixed Losses for Transformers and Shunt Reactors as per Central Electricity Authority (CEA) letter CEA/PSE&TD/218/3056-4028 dated 01.03.19 shall be as below: For 50MVA, 132kV : No Load Loss (kW) - 25kW Load Loss (kW) - 95 kW I2R (kW) - 76kW Stray + Eddy (kW) - 20 kW Aux. Loss - 3kW	As per CEA guidelines for 50MVA, 132/33 kV transformer LL shall be 125 kW I2R - 105 kW Stray+Eddy - 20 kW Aux L-3 KW and NLl - 25 kW. Letter copy attached	Accepted. It should be as per CEA guidelines. Please refer to the addendum.	
131	section - 4 - Technical specification for Power transformer, 4.28	Technical Parameters for 50MVA Power transformer - 1.9 - HV- LV impedance- Max. tap - 10.3% Rat tap - 12.5% Min tap - 15.4%	Technical Parameters for 50MVA Power transformer - 1.9 - Please allow IS tolerance on HV- LV impedance as below Max. tap - 10.3% +/- 15% Rat tap - 12.5% +/- 10% Min tap - 15.4% +/- 15%	As per Bid documents.	

132	As per 1_TECH_SPEC_TFR,17.4.0. (ii)	Bidder should have successfully carried out Dynamic Short Circuit test on three phase bank of similar or higher MVA transformer.	As per our understanding bidder should only possess the Dynamic SC Test report for similar or higher MVA Trf against the tendered rating to meet the subjected requirement, please confirm.	We will accept dynamic short circuit test report of similar or higher rating transformer. Report should not be older than 5 years. Test report of higher class/rating of Transformer are acceptable with commitment to perform the type test free of any charge on the supplied Transformer after the award of contract.	
133	As per 1_TECH_SPEC_TFR, 17.9.1.3	The manufacturer shall provide all necessary information and calculations to demonstrate that the transformer meets the requirements for short circuit strength and durability. The latest recommendations of IEC and CIGRE SC 12 shall be applied for short circuit withstand evaluation.	Kindly note, IEC &Cigre SC 12 are adopting different methods/calculations for ascertaining SC withstand capability of the design. So it will make the design review process complicated which will lead to confusion. As PGCIL is following design review as per CIGRE SC 12 which is well accepted, we would request you to SC withstand capability should be proven as per CIGRE SC 12 guidelines being adopted by PGCIL	The bidder may follow IEC or CIGRE SC 12 guidelines for ascertaining SC withstand capability of the design of transformer.	
134	As per 1_TECH_SPEC_TFR, 17.3.1.2	Parallel operation of transformer.	Transformer shall run in parallel with the existing transformer only if the impedance, vector group, tap range, OLTC connection	For parallel operation necessary data should match the other existing Transformer in the substation. All related	

			shall be as per the technical parameters mentioned In Annexure - A 4.0 and Annexure - A 3.0	data shall be furnished during detail engineering.	
135	As per 1_TECH_SPEC_TFR, 17.40.0	Transformer connected to GIS	Clarify whether these transformers are connected to GIS.	The specified clause is not in the BID document of package I,J & K.	
136	As per 1_TECH_SPEC_TFR,17.14.0	Bushings	Clarify whether bushings above 52 kV class are OIP or RIP Bushings. Both requirements are mentioned in the specification.	As per Bid Clause 4.17.0	
137	As per 1_TECH_SPEC_TFR, 17.14.0	BCT Length - Mentioned as 600mm in case of accommodating 2 CTs.	BCT Length shall depend on the height of the CTs and shall be decided by the bidder during detailed engineering stage, please confirm	Accepted	
138	As per 1_TECH_SPEC_TFR, 17.15.1.0	Cooling equipment for radiator bank. In case of separately mounted radiator bank it is mentioned that the banks shall be placed on the either side of the transformer tank.	Please consider the arrangement of Cooling banks is planned based on the clearance requirements of Substations and accessories (like cable box and Bushing clearance etc.,) Hence, the same to be as per design choice and we propose for both the radiator banks on the one side.	It should be decided as per site condition and will be clarify during detail engineering.	
139	section - 4 - Technical specification for Power transformer, 4.1.0	(g) Details of substation where augmentation of transformers will be carried out.	In no case shall the foundation of the existing transformers will be matched to the present designs.	The foundation of existing Transformer may be required.	
140	General	Cables	Cables from transformer accessories to marshalling box shall be in manufacturers scope. All other cables in	It is included in the scope of the successful bidder.	

			substation shall not be in manufacturers scope.		
141	section - 4 - Technical specification for Power transformer, 4.21.3	Qty of Digital RTCC relays	One number Digital RTCC relay shall be considered per Transformer. No Spare Digital RTCC relay shall be considered. Please confirm	Yes	
142	Section - 4 - Technical specification for Power transformer, 4.12.7	All transformer and reactor tanks should generally be of conventional type.	160MVA transformer shall be of Bell and bottom tank construction.	Transformer Tank shall be Convectional type.	
143	(VOLUME -2) (Technical Specifications), 1.18.2, pg no. 7	(a) Tests are conducted in an independent and well-known testing laboratory, or (b) 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 clients or purchaser.	Some test of the offered modules are conducted at manufacturers test Lab that is ABB Italy and is witnessed by known accredited testing 'agency such as ACAE and CESI. These bodies are certified to witness Type test according to IEC procedures. Request to accept the TTRs based on same.	Accepted	

144	(VOLUME -2) (Technical Specifications), 1.26.0 HEALTH, SAFETY AND ENVIRONMENT (HSE) PLAN, Pg no. 8	The contractor/subcontractor should adhere to the Environmental and Social Management Plan (ESMP). The payment is linked towards compliance to responsibility specified under the generic ESMP attached in Annexure-A(in separate file).	it is to be informed as our scope is supply & supervision of Erection, Testing & commissioning of proposed Hybrid module. ESMP adherence shall be EPC scope. Any payments related to Hybrid GIS shall not be linked to any non-compliance by EPC.	As per bid	
145	(VOLUME -2) (Technical Specifications), 1.18.4, pg no. 8	1.18.4 Type Test Reports older than five (5) years on the date of Technical bid opening shall not be accepted.	Our offered module has been type tested as per applicable IEC that is 62271-205 for Hybrid switchgear and there is no change in design thereafter. Request you to accept Type test reports valid within 10 years. Same is accepted by various utilities sucah as GETCO, MSETCL, PGCIL, KPTCL etc.	If there is no design change than an undertaking has to be submitted by the bidder confirming there is no design changes in last 5 years from the date of bid opening.	
146	(VOLUME -2) (Technical Specifications), 9.1.0, pg. No. 119	For all control/protection/ instrumentation purposes PVC insulated armoured control cables of minimum 2.5 sq. mm Size with stranded Copper conductors shall be used.	For Hybrid switchgear as per manufacture standard shall be offered as below which is suffice to meet AEGCL requirement and accepted in every major utilities such as PGCIL, GETCO, MSETCL etc. Cables between Modules and LCC shall be shielded cables. Cables/wire inside LCC shall be 1.1kV PVC FRLS type. Cables for CT shall be	As per relevant standard.	

			4sqmm and for control circuit shall be 1.5 sq mm. and for motor circuits it shall be 2.5 sqmm.		
147	(VOLUME -2) (Technical Specifications), 11.2.1, pg. No. 139	34. Support structure shall be hot dip galvanised according to DIN 50976 and Zinc of purity not less than 99.95% shall be used, Zinc shall conform to IS 209/1979 or its latest revisions.	DIN 50976 is now absolute and ISO 1461 is followed for hot dip galvanising. Zinc coating shall be 610 gm/M2 as standard and same shall be suffice the requirement.	Will be finalised during detail engineering	
148	(VOLUME -2) (Technical Specifications), 11.4.1, pg. No. 140	GUARANTEED TECHNICAL PARTICULARS	Request to confirm the Control & Motor voltage. Whether it is 110V DC or 220V DC. Further request to confirm AC auxillary source voltage. Whether it is 230V AC?	As per Annexure A.	
149	(VOLUME -2) (Technical Specifications), 11.8.1, pg. No. 142	The steel structure will be made of hot dip galvanized steel.	DIN 50976 is now absolute and ISO 1461 is followed for hot dip galvanising. Zinc coating shall be 610 gm/M2 as standard and same shall be suffice the requirement.	Will be finalised during detail engineering	
150	(VOLUME -2) (Technical Specifications)	CT specification	Request to confirm CT specification details that will be installed in Hybrid GIS	During details engineering.	

151	Volume-1, 25. Commissioning and Operational Acceptance, pg. No. 202	25.2.2 The Guarantee Test of the Facilities shall be successfully completed within 30 (thirty) days from the date of Completion.	Bidder envisaged that Functional guarantee test is not applicable for Hybrid GIS as it is normally applicable for Transformer. However necessary commissioning test applicable as per IEC/Technical specification of HGIS. shall be performed on Hybrid switchgear	Accepted	
152	Vol I – 4	Conflict of Interest	Can manufacture authorization be taken from the manufacture who himself is participating as bidder in these tenders?	As per bid.	
153			Whether a manufacturer can provide manufacturer's authorization to more than One bidder ?	As per bid	