

Invitation for Bids NO. IFB No: [CPC/JICA/ICB/03/18-19]				
Reference Identification No: [OPTCL/JICA/PKG-3]		Loan Agreement No: [ID-P245]		
NAME OF PROJECT: Procurement of Plant Design, Supply and Installation of Sub-stations (400KV, 220KV & 33kV Outdoor GIS S/S) At Bhadrak in Odisha state of India under Package-3				
REPLY TO PRE-BID QUERIES RECEIVED FROM FIRMS ON VARIOUS DATES				
NAME OF CLIENT:- ODISHA POWER TRANSMISSION CORPORATION LIMITED, Bhubaneswar				
Sl. No.	Volume / Section	Clause No / Drawing No.	Bidder's Query	OPTCL's Reply
1. COMMERCIAL QUERIES				
1	Volume-I, section IV Bidding Forms	Bid security Format	Please provide the client Swift details for taking the swift BG. Also please confirm that bid security is payable at Bhubaneswar. If it is payable at bhubaneswar, please provide the list of Bhubaneswar banks and branch details where the BG will be encashed.	ICICI Bank Bhubaneswar, (The Unique Identifier for field 7037 is "OPTCL541405793") IFSC Code ICIC0000061. Branch Address: ICICI Bank Ltd Bhubaneswar Main Branch, Bhubaneswar
2	Volume-I, BDS & Section-III Evaluation & Qualification Criteria	, ITB, 11.2 (f) & cl no: 1.1.3.1	As per referred clause, the following to be submitted, 1. Details of Manufacturing / Fabrication / Service facilities of the Bidder or its Sub-Vendor / Sub-Manufacturer. 2. Type Test certificate of the Bidder or its Sub-Vendor/Manufacturer, of the Major items of Plant & Equipment (GIS Equipment with GIB, Transformers, CR panel, CT & PT, LA and Isolator) conducted as per EQC to be supplied under this contract. 3. Details of credential of Sub-Vendor/Manufacturer to be engaged under the Contract in satisfaction of EQC. 4. Details of credential of Sub-Contractor(s) to be engaged under the Contract in satisfaction of EQC. Also, as per cl no: 1.1.3.1 of evaluation & qualification criteria, type test and supply record to be furnished for Transformers, CT & PT, CRP, SAS, GIS. Since, specific qualification criteria is mentioned for GIS & SAS equipments for manufacturers in EQC 2.5, we propose to submit credentials and Type test reports of the above mentioned equipments only during bid submission. Balance type test reports of the main equipments will be submitted after award of contract. Kindly confirm.	It is recommended to submit all the credentials and type test reports during bid submission itself.
3	Volume-I Sec-IX Contract Forms	Effective Date of Contract	As per the referred clause, "The Effective date of contract shall be reckoned from the date when the Contract Agreement has been duly executed for and on behalf of the Employer and the Contractor. we understand that contract agreement will be executed only after the clear handing over of site for construction of Substation in addition to the above clause. Kindly confirm.	As per SBD
4	Volume-I General	Bocw cess	We understand that 1% BOCW cess shall be applicable only on the Civil & Installation works. Please confirm.	BOCW cess shall be applicable on the whole contract value. The same shall be deducted from bills as applicable from time to time (the present rate being @1%)
5	Vol-I, Section-III -Evaluation & Qualification criteria & Technical specification of transformers	cl no: 1.2.2 e vii) & cl no: 5.2 of transformer spec	As per the referred clause, "For the purpose of evaluation, loss capitalization of the Transformer shall not be considered." But as per the Transformer specification, capitalized cost is mentioned which is applicable for evaluation of bid. As both the clauses are contradictory, request you to kindly clarify whether the loss capitalization is applicable for bid evaluation or not. Also, please define the maximum losses allowed in transformers, in case the loss capitalisation is not considered for evaluation	As per the Clause 1.2 Economic Evaluation, Section III, "Loss capitalization of the Transformers shall not be considered for evaluation." Since the loss capitalization of transformers are not considered for evaluation of bids, the Power transformer shall be supplied conforming to the Technical specification. TS says "Loss figure for the transformers should not exceed as detailed below :- (A) 40MVA, 220/33KV Power Transformer: i) No load losses- 19.00 KW ii) Load (Copper) losses including Auxiliary losses- 116.00KW (B) 500MVA, 400/220/33KV ICT: i) No load losses- 80.00 KW ii) Load (Copper) losses including Auxiliary losses- 540.00KW The transformer losses, guaranteed in the bid are to be supported by design calculations along with documentary evidences."

6	General		We understand that operation and maintenance of the substation is not in the scope of the bidder. Please confirm.	Confirmed.
7	General		We trust that, OPTCL will hand over the legally encumbrance free land to the bidder at the time of NOA. Please confirm.	Confirmed.
8	Vol-I, Section - IX, contract forms	Appendix - 4 Time schedule	In reference to the referred annexure of work completion format, the total scheduled duration for completion of works is 24 months and Defect Liability period is 12 months from the date of commissioning. Kindly Confirm.	As per SBD
9	section IX, contract Forms	Appendix 5 List of Major Items of plant and installation Services and List of Approved Subcontractors	As per the referred clause, The bidder can propose any Subcontractors/Manufacturers for items, but no Subcontracts shall be placed with any such Subcontractors/ Manufacturers for items until the Subcontractors have been approved in writing by the Employer and their names have been added to this list of Approved Subcontractors. If so, pls confirm the approval time and procedure from the date of request for a Subcontractors/Manufacturer	As per SBD
10	Vol-III - Technical specifications of Transformer	Technical Annexures, Annexures - I to Annexure - IX	As per the referred clause, for the power transformers, various documents like "Annexure-I: Schedule of quantity & Delivery, Annexure-II: Maximum flux density & Core weight calculation, Annexure-III: Details of loss calculation, Annexure-IV: Guaranteed Technical Particulars, Annexure-V: Additional schedule of information, Annexure-VI: Check-List towards type test reports, Annexure-VII: Calibration status of testing equipment's & Instruments/ meters, Annexure-VIII: Check List for delivery schedule & Annexure-IX: Abstract of Terms & Conditions". Annexure-II to IX are to be filled up in complete shape by the bidders, failing which their tenders are liable for rejection". We understand that, above documents as per annexures are being asked by OPTCL while inviting tenders for procurement of individual equipment directly from manufacturers. However, in this regard we would like to highlight that, present tender being turnkey package for construction of overall substation involving numerous equipment's & multiple manufacturers for each equipment/ items, it is very difficult for an EPC contractors to collect all of the documents during tendering stage apart from its own qualification documents. Hence we request you to accept our proposal of submission of only the Manufacturer's standard GTPs along with the Manufacturer's authorization letters during tendering stage & remaining documents shall be submitted during execution stage for all the equipment's as applicable, as per tender documents. Undertaking to this effect can be submitted from our end during tendering stage. Please confirm your acceptance	Confirmed.
11	Vol III , Technical Specification for 400 / 220 / 132 kV Outdoor Gas Insulated Switchgear (GIS)	cl no: 4.2.13, other services	As per the referred clause, We understand that consultant is applicable for the said project. Therefore, We request you to provide the consultant details and also kindly define the contractor scope with the consultant during the prebid, postbid and in getting the engineering approvals after the award of contract.	Will be provided to the bidder in the event of award of the contract.
12	Volume-I , Section-IV Section- VII General Conditions	Biding Forms , Sch No: 6, Grans Summary GCC cl no: 14, Taxes & Duties	As per the referred clause " GST/ any other taxes/duties/levies shall be inclusive in the bid price and shall not be paid/reimbursed separately" Also "If any rates of Tax are increased or decreased, a new Tax is introduced, an existing Tax is abolished, or any change in interpretation or application of any Tax occurs in the course of the performance of Contract, which was or will be assessed on the Contractor, Subcontractors or their employees in connection with performance of the Contract, an equitable adjustment of the Contract Price shall be made to fully take into account any such change by addition to the Contract Price or deduction therefrom, as the case may be, in accordance with GC Clause 36 hereof" Kindly explain on the term "equitable adjustment" and the modality in which it will be operated.	As per SBD.

13	Vol-I, Section-III - Evaluation and Qualification Criteria	Clause 1.2.1 - ii (a) - Quantifiable nonmaterial nonconformities	<p>As per the referred clause, "i. The cost of all quantifiable nonmaterial nonconformities or omissions (minor omissions or missing items) shall be evaluated as follows: (a) To this effect, the Bid Price shall be adjusted for comparison purposes only, to reflect the price of missing or non-conforming item or component, by taking the price equal to highest unit rate quoted for the same item(s) by other bidders. However, if there is only one bid, the rate of that/those missing item(s) as estimated by the employer would be taken and Bid Price shall be adjusted for evaluation and comparison purposes only. In case of award of contract, the successful bidder would be required to supply missing item(s) free of cost and tax liability will be borne by the successful bidder".</p> <p>In this regard, since the complete scope has to be quoted by the Bidders on single responsibility basis, we request you not to add any amount on account of any missing item/ in case any items are not loaded as it may change the competitive position of a bidder due to highest price loading for a missing item. We request to modify the clause as below: "Any material/works not specifically priced by a bidder in BPS, shall be deemed to be included in the price of other material/ works." Please confirm your acceptance & amend the document accordingly</p>	As per SBD
14	Vol-I, Section-IX - Contract Forms	Appendix 1. Terms and Procedures of Payment Appendix 6 - Scope of works & Supply by the Employer	<p>As per the clause 1. a (ii), First instalment of the advance of 5 % shall be paid against evidence (Rental agreement with land lord) of establishment of site office.</p> <p>However, we understand that the contractor can set up their site office within the substation premises to speed up the execution activities, which is the normal industrial practice being followed. Please confirm.</p> <p>Further, the necessity of "Rental agreement with land lord" does not arise in such condition. Hence we request you to delete such requirement for availing the advance amount.</p>	As per SBD.
15	Vol-I, Section-IX - Contract Forms	Appendix 1. Terms and Procedures of Payment	<p>As per the referred clause it states that " All advance payment shall be interest bearing and shall be recovered progressively from each running bill"</p> <p>From the above clause we presume that interest bearing advance is optional and if contractor doesnt opt for the advance, then progressive payment shall be 90% on prorata basis for supply and installation services.</p> <p>Kindly confirm.</p>	Pl refer Addendum to on amended Appendix 1. Terms and Procedures of Payment.
16	Vol-I, Section-IX - Contract Forms	Appendix 1. Terms and Procedures of Payment	<p>As per the referred clause it states that " All advance payment shall be interest bearing and shall be recovered progressively from each running bill"</p> <p>Being the JICA funded project, we request you to provide the interest free advance to facilitate the mobilization activities.</p> <p>Kindly confirm our request.</p>	Pl refer Addendum to on amended Appendix 1. Terms and Procedures of Payment.
17	Vol-I, Bidding Forms	Bidding Forms, price schedules, schedule No:1 & Schedule No: 2	<p>From the referred schedules of Bidding Forms, We understand that the unit price as quoted in Sch-1/Sch-2 includes the Exworks price along with respective freight Charges and respective taxes(GST/Custom Duty) as applicable.</p> <p>Also, confirm that Taxes and Duties including custom Duties is taken for evaluation.</p> <p>Kindly confirm.</p>	As per SBD.
18		Soil investigation/ Soil profile data	<p>As requested in the Prebid meeting, since conducting soil investigation is not allowed for the bidders in the proposed substation plot due to code of conduct act on account of election, we request you to provide the soil investigation report or Soil bearing capacity data to design the foundations of the building and equipments of the substations by the bidder.</p>	Bidder's scope.
2. CIVIL QUERIES				

1	Price schedule, schedule No.2 (supply) & Price schedule, schedule No. 4. Installation and Other Services (Sub-station), PART A - Civil Works	Sl. No.5 & Sl. No.5	In schedule No. 2 - Supply, Sl. no: 5, Item for GI Cable trays including support GI angle for various cable trench section is given in meter. In schedule No. 4 - Installation and Other Services (Sub-station), Part A- Civil works, Sl. no: 5, item for cable trench is given meter and mentioned that this also including supply of GI angle for cable trays support. Please clarify, the GI angle required for cable trays support will be paid under supply schedule or Installation schedule(Civil works).	Pl refer amended BoQ.
2	Price schedule, schedule No. 4. Installation and Other Services (Sub-station), PART A - Civil Works	--	Please furnish the soil investigation report (if available), in order to decide the foundation depth.	Bidder's scope.
3	Price schedule, schedule No. 4. Installation and Other Services (Sub-station), PART A - Civil Works	--	Please furnish the contour map showing existing ground level(if available), in order to decide the foundation depth.	Bidder's scope.
4	Price schedule, schedule No. 4. Installation and Other Services (Sub-station), PART A - Civil Works	Sl. no:4.1 to 4.4	In the price schedule Sl. No: 4.1 to 4.4 , it is mentioned that "EXCAVATION FOR PREPARATION OF FOUNDATION WORK FOR THE ABOVE SWITCHYARD COLUMN, EQUIPMENT etc.", We trust that, the unit Qty. given in referred Sl. Nos. (i.e. Excavation, PCC, RCC & Reinforcement) is inclusive of Foundation works required for the following : i. Towers structure foundations (Including LM) ii. Equipment structure Foundation iii. Bus duct & SF6 air bushing foundation iv. Outdoor GIS foundation Kindly confirm our understanding.	As per BOQ.
5	Price schedule, schedule No. 4. Installation and Other Services (Sub-station), PART A - Civil Works	--	We do not envisage pile foundations for the proposed Bhadrak SS. Please confirm. If it is required, we trust that the same shall be paid as an additional item with mutually agreed rate.	As per BOQ and SBD.
6	Volume - III (TS) E6 - Civil works, Page no: 23 & 41	13.1 & 16.18	The referred clause, the grade of reinforcement is mention as Fe 415. We propose to use Fe 500 grade, Since the same is not readily available in the market. Kindly confirm.	the grade of reinforcement shall be Fe 500 or above. Pl refer BoQ.
7	Volume - III (TS) E6 - Civil works, Page no: 38 & 41	16.10 & 1.4 a	As per the clause no:16.10, the minimum thickness of external walls shall be 230mm. However as per clause no:1.4 b), it is indicated as " external walls shall be 250mm thick". Please clarify the wall thickness.	External walls shall be 250mm thick
8	Volume III (TS) E6 - Civil works, Page no: 53 & Price schedule, schedule No. 4. Installation and Other Services (Sub-station), PART A - Civil Works	III & --	As there is a discrepancy between Civil mode of measurement and price schedule. Please clarify whether the civil works will be paid as per price schedule or mode of measurement. If the Civil works shall be paid as per mode of measurement. Please include the following item in the price schedule separately. 1.Reinforcement steel 2.Misc. Structural Steel 3. Stone filling for Transformers.	As per price schedule.
9	Price schedule, schedule No. 4. Installation and Other Services (Sub-station), PART A - Civil Works	Sl.no : 10 & Sl.no : 9	In the price schedule item for drain is given separately, however in road work it is mentioned that, the road shall be have Provision of drains on both the side of the roads for easy discharge of rain water. Please clarify, whether the drain will be paid along the road work (or) the same shall be paid separately.	The drains on both the side of the road are an integral part of "road works" and will not be paid separately.
10	Price schedule, schedule No. 4. Installation and Other Services (Sub-station), PART A - Civil Works	Sl.no : 11	It is mentioned that, rail track should be extended up to the approaching road. We trust that, the road laid in front of transformer is approach road. Please confirm.	Confirmed.
11	Price schedule, schedule No. 4. Installation and Other Services (Sub-station), PART A - Civil Works	--	Please confirm, whether we can propose the substation in multi levels. If yes, RCC / stone masonry Retaining wall may be required to be provided. Kindly add an item for the same in the price schedule.	As per BOQ and BSD.

12	Price schedule, schedule No. 4. Installation and Other Services (Sub-station), PART A - Civil Works	Sl.no : 24	As per the referred item no. 24 of Price Schedule, the pump house shall be connected to the main road of the switchyard with an approach road. Please confirm whether the approach road for the pump house will be paid as per item no. 24 or item no. 9 of Price Schedule.	Approach road to the pump house is a part of the total scope of the item 'PUMP HOUSE'.
13	Volume-III (TS) E2 - General Technical Clause, Page no: 16	10.2.2.	As per referred clause, it states that "The minimum weight of the zinc coating shall be 610 gm/sq. m". We wish to propose the following galvanizing thickness for structures as per codal provisions of IS 4759 1. 610gm/sq. m for fabricated steel articles 2. 300gm/sq. m for threaded works (10mm dia and over) Kindly confirm.	As per technical specifications and relevant IS.
14	Scope of works-VOL-II- Section I (Page no: 11) & Price schedule, schedule VIIB (Civil & Erection) Civil works	--	We trust that , if any additional civil item is required in addition to Price schedule item, the same shall be payable as additional item with mutually agreed rate by M/s OPTCL. Please confirm.	As per SBD.
15	Volume III (TS) E6 - Civil works, Page no: 13	8.1	As per referred clause, Manholes shall be provided wherever required. However there is no separate item for the same in the price schedule. Kindly add an item for the same in price schedule.	As per BOQ.
16	Price schedule, schedule No. 4. Installation and Other Services (Sub-station), PART A - Civil Works	Sl.no : 3	As per price schedule, Boundary wall is in bidder's scope. However the quantity indicated under this item is 0m. We trust that it is typographical error. Please confirm and kindly revise the quantity.	Pl refer amended BOQ.
17	Volume III (TS) E6 - Civil works, Page no: 23 & 25	13.1 & 14.1	As per referred clause, Building plinths shall be minimum 300mm above finished ground level. However, as per clause no:14.1, Building plinths shall be minimum 500mm above finished ground level. Please confirm which clause has to be followed.	Building plinths shall be minimum 500mm above finished ground level.
18	Price schedule, schedule No. 4. Installation and Other Services (Sub-station), PART A - Civil Works	Sl.no : 23	As per referred item (Sl. No. 23) in price schedule, construction of security shed and watch tower shed at the corners of switch yard is in bidder's scope. However item for security shed is given under Sl. No : 23.1 and item for watch tower shed is not included in Price Schedule. <u>Please include the item for the watch tower shed in Price schedule.</u>	As per BOQ.
19	Volume III (TS) E6 - Civil works, Page no: 4 & 46	2.1.1 & 25.0	As per referred clause, The garden to be developed in front of the control room building shall be of size 30mX20m. As per referred clause, a garden in front of the control room building to be developed shall be of size 30mX10m. <u>Please confirm the size of garden to be developed.</u>	As per BoQ .
20	Price schedule, schedule No. 4. Installation and Other Services (Sub-station), PART A - Civil Works & Volume III (TS) E6 - Civil works, Page no: 47	Sl.no : 22.9 & 27.0	As per price schedule, water tank for fire fighting shall be provided below ground. As per referred clause, it is mentioned that roof of water tank shall be of corrugated A.C sheet roofing. Since it is underground water tank, we wish to propose RCC roofing instead of corrugated A.C sheet roofing which will serve better purpose. Please confirm if it is acceptable.	As per BoQ.
21	Price schedule, schedule No. 4. Installation and Other Services (Sub-station), PART A - Civil Works	Sl.no : 8, Sl.no : 30, Sl.no : 23.1 & Sl.no : 29	Kindly provide following drawings in order to estimate quantum of civil work. 1. Control Room Building 2. Residential Quarters - D type & E type 3. Security shed 4. Vehicle parking shed	Bidder's Scope.

3. ELECTRICAL QUERIES				
1	General Inputs		<p>Please furnish the following details:</p> <p>a) Plot plan for the substation showing tentative arrangement of GIS, transformers & line orientation</p> <p>b) Control room building layout</p> <p>c) Contour layout</p> <p>d) Equipment layout for Type-D & Type-E quarters</p> <p>e) SAS Architecture</p> <p>f) Remote end location and total length of the line</p> <p>g) Cable trench section drawing.</p>	Indicative SLD and Layout uploaded in website.
2	Volume-II of III, Schedule-1-SS - S.No.1, Employer's Requirement and Single Line Diagram		As per the line item description, the Short Circuit rating for 420kV outdoor GIS is indicated as 63kA for 3 secs. However, the same is indicated as 63/40kA for 1 sec as per E3-System data Sl.No.11 & 12. Please check and clarify the actual short circuit level & its duration.	Short Circuit rating for 420kV outdoor GIS shall be 63kA for 3 secs
3	Volume-II of III, Schedule-1-SS - S.No.2, Employer's Requirement and Single Line Diagram		As per the line item description, the Short Circuit rating for 245kV outdoor GIS is indicated as 50kA for 3 secs. However, the same is indicated as 40kA for 1 sec as per E3-System data Sl.No.11 & 12. Please check and clarify the actual short circuit level & its duration.	Short circuit rating for 245kV outdoor GIS shall be 50kA for 3 seconds.
4	Volume-II of III, Schedule-1-SS - S.No.4.1, Employer's Requirement and Single Line Diagram		As per the line item description, the Short Circuit rating for 36kV GIS is indicated as 31.5kA for 3 secs. However, the same is indicated as 25kA for 3 secs as per E3-System data Sl.No.11 & 12. Please check and clarify the actual short circuit level & its duration.	Short circuit rating for 36kV GIS shall be 31.5kA for 3 seconds.
5	Volume-II of III, Schedule-1-SS - S.No.1 - 400kV GIS		As per the line item description, the Continuous Current rating for 420kV outdoor GIS Busbar and Bay Equipments is indicated as 2000A. However the same is indicated as 3150A in Single Line Diagram and Employer's requirement. Please check and clarify the actual rating.	Continuous current rating for 420kV outdoor GIS Busbar and Bay Equipments shall be 3,150A.
6	Volume-II of III, Schedule-1-SS - S.No.2 - 220kV GIS		As per the line item description, the Continuous Current rating for 245kV outdoor GIS Busbar is indicated as 2000A. However the same is indicated as 3150A in Single Line Diagram and Employer's requirement. Please check and clarify the actual rating.	Continuous current rating for 245kV outdoor GIS Busbar shall be 3150A .
7	Volume-II of III, Schedule-1-SS - S.No.35		As per the line item description, the transformer rating for the 220/33kV is 40MVA. However the same is indicated as 20MVA in Single Line Diagram and Employer's requirement. Please check and clarify the actual rating of the transformer.	As per BOQ.
8	Volume-II of III, Schedule-1-SS - S.No.14.1		As per the line item description, the station transformer rating for the 33/0.415kV is 1000kVA. However the same is indicated as 250kVA in Single Line Diagram. Please check and clarify the actual rating of the station transformer.	Pl refer amended BoQ.
9	Volume-II of III, Schedule-1-SS - S.No. 1.3 & 2.5		As per the line item description, the Bus Duct quantity for the 400kV and 220kV is given as 900 and 1000RM respectively. However the same item is given in "lot" items in the employer's requirement. We presume the same shall be executed as unit rate item. Please confirm.	As per BOQ.
10	Volume-II of III, Schedule-1-SS - S.No.3.10, Employer's Requirement and Single Line Diagram		As per the line item description, the continuous current rating for the 36kV Isolator is 1250A. However, the same is indicated as 800A as per E13-Isolators, Clause 1, Sl.No.8. Please check and clarify the actual rating of the isolator.	As per BOQ.
11	Vol-II of III, Schedule-1-SS , S.No.3.2 & 3.5, 400kV & 220kV outdoor Isolator		Outdoor type center break Isolator is shown in Tender General layout of 400kV and 220kV line bay . But the technical specification provided is for double break isolator. Please check and confirm the type of isolator. If it is center break isolator, please provide the specification for the same	Outdoor type center break Isolator shall be provided for 400kV and 220kV line bay as per BoQ. Technical Specification for the same is uploaded.
12	Volume-II of III, Schedule-1-SS - S.No.3.4, 245kV CVT		As per the line item description, the coupling capacitance value of the 245kV CVT is missing. Kindly furnish the capacitance value.	Pl. refer Amended BoQ.
13	Volume-II of III, Schedule-1-SS - S.No. 3.7		As per the line item description, the nominal discharge current for the 400kV Surge Arrester is 20kA. However, as per technical specification, E15-Surge Arrester, Appendix - I, S.No 12, it is mentioned that 20kA is to be considered only for insulation co-ordination. But the rating of surge arrester shall be 10kA. Hence, please confirm whether the line discharge current is to be considered as 10kA or 20kA.	As per BOQ.

14	Volume-II of III, Schedule-1-SS - S.No. 3.8		As per the line item description, 216kV Surge Arrester quantity is 18 Nos. But as per SLD the same shall be 21 Nos. Line Bay - 4*3=12 Nos. LV Side of 400/220kV Transformer Bay - 2*3=6 Nos. HV side of 220/33kV Transformer Bay - 1*3=3 Nos. Accordingly, the total quantity is 21 Nos. Please check and revise the price schedule. In addition to that S.No. 4.11, 220kV LA clamp quantity also to be revised.	Pl. refer Amended BoQ.
15	Volume-II of III, Schedule-1-SS - S.No.4.3, 33kV Cable termination kit		Please bifurcate the referred line item as indoor (GIS) and outdoor 33kV cable termination. Further the quantity shall be 12Nos. (3# indoor & 3# outdoor). Please check and confirm.	Pl. refer Amended BoQ.
16	Volume-II of III, Schedule-1-SS - S.No. 4.14		As per the line item description, the earthing quantity for the mainmat is missing. Please add a separate line item for mainmat and revise the price schedule.	Pl. refer Amended BoQ.
17	Volume-II of III, Schedule-1-SS - S.No. 13.5		Kindly clarify about the purpose of RTU as Substation Automation System is used for controlling.	Pl. refer Amended BoQ.
18	Vol-II of III - Schedule-1-SS , S.No.13.6 & 13.7, 48V battery and battery charger		The quantity of 48V Battery & charger is indicated as 1 set. We presume 1 set as 1 number. Please confirm.	Pl. refer Amended BoQ.
19	Volume-II of III, Schedule-1-SS - S.No. 13.12		Please note that Earth flat & ACDB are once again repeated under SI. No. 13.12 of BPS. Already these items are covered under SI. No. 4.14 & 20.1 respectively. Please clarify the items to be quoted under this line item of BPS against Earthing & ACDB.	Pl. refer Amended BoQ.
20	Volume-II of III, Schedule-1-SS - S.No. 19.3.3		As per the line item description, the quantity of Tie breaker protection panel is indicated as 4 Nos. But as per scope of works, the number of tie bays are only 3nos. Please check and amend the BPS suitably.	Pl. refer Amended BoQ.
21	Vol-II of III - Schedule-1-SS , S.No.19.3.4 and 19.4.4		Please clarify whether Busbar protection is centralized or Decentralized?	As per TS.
22	Volume-II of III, Schedule-1-SS - S.No. 19.6 and 19.6.1, Energy Meter		With respect to Energy meters please confirm the following: a) specification detailing the requirements such as ABT & TOD features b) Whether separate CT & PT cores are required? c) Bays for which Tariff metering is required in each voltage level	Pl. refer Amended BoQ.
23	Vol.II of III - Schedule-1-SS, SI No. 20, AC & DC system		As there is no line item available for Diesel generator in Price schedule, please clarify the source for Emergency AC supply.	Pl. refer Amended BoQ.
24	Vol- II of III - Schedule-1-SS , S.No.20.2.2, 220V DC Emergency DB		Please furnish the purpose of 220V DC emergency DB and its configuration as the feeder list for the same is not available in Section E19 - Distribution board.	PL refer TS.
25	Vol-II of III - Schedule-1-SS , S.No.20.2.3 & 20.2.4, 220V battery and battery charger		As per referred line item description of price schedule, 2 set of battery charger is mentioned. However, as per Technical specification requirement, Battery charger shall be float and float cum boost charger. We understand that 1 set of battery charger comprises of 1no. float and 1no. float cum boost charger. Accordingly, 2sets shall consists of 2No. Float chargers & 2No. Float-cum-boost chargers. Please confirm whether bidders understanding is order and inform all the bidders to quote suitably.	As per BOQ & technical specifications
26	Volume-II of III, Schedule-1-SS		33kV Bus Coupler protection panel is missing in the Price bid Schedule. Please check and add a separate line item in the BPS.	Pl. refer Amended BoQ.
27	Vol-III of III, Section E1 - General clause, 1.3 Interfacial point of line termination		We understand that Transmission line hardware is not included in the scope of this package. The same shall be supplied by TL contractor. Please confirm whether Bidder's understanding is in order.	As per BOQ.
28	Vol-III of III, Section E2 - General Technical clause, 12.4.1 General		Based on the referred clauses, we propose cable laying on angle supports in outdoor switchyard and on trays inside control building & GIS building. Please confirm.	It shall be as per the TS and BOQ.
29	Vol-III of III, Section E3 - System Data, S.No. 17		As per the referred section, the creepage distance is given for 25mm/kV. However the creepage for SF6 to Air Bushing is mentioned as 31mm/kV as per Section E30A, Cl.4.2.7, Page 26 of 50. Please check and clarify.	Creepage for SF6 to Air Bushing mentioned as 31mm/kV as per Section E30A, Cl.4.2.7 shall be considered.
30	Vol-III of III, Section E6, Civil works, Clause No. 12.8.1		As per referred clause, clear (vertical) space of at least 300mm shall be available for each tier in cable trench. But as per same clause, page No. 21(table), gap between two angles shall be 200mm. As both the clauses are contradicting, Please check and confirm actual vertical space between tiers.	The data given in the table is to be considered.
31	Vol-III of III, Section E17 - Battery and Battery Charger, Clause B11		As per the referred clause, lead acid Plante batteries are to be considered and ratings as follows; 1. 220V, 645AH Plante battery for 400kV - Float & float cum boost charger 2. For 48V, two different capacities are mentioned (i.e., 350Ah & 550Ah). Further specification for 48V VRLA Batteries are also available. As per BPS, Plante' type is proposed for 220V & VRLA is proposed for 48V. Hence, please confirm the type and capacity of Battery to be followed for 220V & 48V.	As per BOQ.

32	Vol-III of III, Section E21-CONTROL & RELAY PANEL TO B, Clause No. 11.4, 400/220kV and 220/33kV Transformer protection panel SI No. 1 & 3		As per referred clause , SI No.1, REF can be in built feature of transformer differential IED. But as per SI No.3 of the same clause, Separate REF relay shall be provided. Please check and confirm the actual requirement.	As per TS.
33	Vol-III of III, Section E21 & E37, TS of control and relay panel		There are two different Specification for Control and relay panel (E21 & E37). We presume that E21 is applicable for conventional control & relay panels. Hence we shall follow only E-37 which is SAS based. Please confirm whether Bidder's understanding is in order.	Revised TS for SAS and protection panels uploaded.
34	Vol-III of III, Section E24 - Sub Station Lighting System		Kindly provide the uniformity ratio (i.e.Min/Max) & Maintenance factor for indoor & Outdoor Lighting.	Will be provided to the bidder during project execution.
35	Vol-III of III, Section E24 - Sub Station Lighting System, Clause 7		As per the referred clause the details of Lighting Transformer is provided. But in price bid schedule the same is missing. Please include the lighting transformer in the price bid schedule, if required. The rating of Lighting transformer is indicated as 100kVA (or) 75kVA. Please check and confirm the exact rating.	As per BOQ.
36	Vol-III of III, Section E30A - 400/220/132kV - Outdoor GIS, Clause 4.2.19		As per the referred clause the type test should be carried out atleast one (1) year before the date of NIT. As the validity is very stringent we request OPTCL to check and extend the validity of type test reports to 10 years.	As per technical specifications.
37	Vol-III of III, Section E30A, GIS technical specification, Clause 4.2.1, Rated current		As per referred clause rated current has been mentioned at 40 Deg. C. But as per Clause No. 4.2.2, Page No. 20, Nominal rating of GIS components shall be 50 deg C. As both the clauses are contradicting, we propose to follow 40Deg. C ambient for all GIS bays in line with IEC.	50 deg C shall be followed.
38	Vol-III of III, Section E30A - 400/220/132kV - Outdoor GIS, Clause 4.2.10		a) Whether Integral type LCC is acceptable for 220kV and 132kV GIS equipment. Please confirm b) Please specify the degree of protection for LCC panel?	a) Confirmed. b) IPS4
39	Vol-III of III, Section E30A 400/220/132kV Outdoor GIS Spec cl.4.2.22, Truck crane		As per the referred clause, Truck crane of suitable capacity is mentioned for outdoor GIS maintenance. In this regard, please add a separate line item in the BPS & furnish technical specifications for the same.	The bidder is required to include the cost of truck crane for the installation and erection only in Price of GIS modules of schedule no.4 under the bidder's responsibility, but the supply of truck crane is not in the scope of the contract.
40	Vol-III of III, Section E33 - Disc and Long Rod insulators		Kindly mention the type of insulator to be supplied for this package; Long rod polymer or Porcelain Disc insulator.	As per BoQ.
41	Vol-III of III, Section E32, Digital power line carrier equipment		As part of tender documents, specification for PLCC is enclosed. However, there is no separate line item for PLCC and its accessories in the BPS. We presume PLCC is not required for this project. Please confirm.	Pl.refer BoQ item: ACCESSORIES FOR PLCC SYSTEM With OPGW cable.
42	Vol-III of III, Section E35, Fiber Optic Terminal Equipment, Clause No. 1.7, Network Management System (NMS)		We are considering only SDH equipment with necessary interface cards as per BPS. Network Management System as indicated in the referred clause is not envisaged in the present scope of work. We presume that NMS shall be included in a separate contract as it involves work at SLDC. Please confirm whether Bidder's understanding is in order.	AS per BoQ and Technical specification.
43	Vol-III of III, Section E35 - TS Fiber Optic Terminal Equipment FOTE, Clause 1.10.		Please specify the following for FOTE: a) Number of directions b) Distance between Dhenkanal & Remote end stations	As per SLD.
44	Vol-III of III, Section E42, 500MVA, 400/220/33kV ICT, Type test charges		As per referred clause, the charges for conducting each type test shall be quoted in the relevant price schedule. But in BPS there is no line item for type test charges. If type test shall be conducted, please include separate line item for same.	The cost of transformer shall be inclusive of all costs towards type test charges, Mandatory spares, Spanners & Special tools, Oil storage tank, Nitrogen injection system for protection against Fire & Explosion, On line insulating oil drying system , On line Dissolved Gas (Multi-gas) and Moisture Analyser, accessories, etc as specified in the Technical specification.
45	Vol-III of III, Section E42, 500MVA, 400/220/33kV ICT, Type test charges		Please confirm if Bidder submits valid type test reports of already type tested transformer, can the repetition of type tests be waived off?	
46	Vol-III of III, Section E42 - Tech. Specification for 500MVA Transformer, Clause 5.4.14(B), Pg. 43		As per the referred clause, the Digital RTCC panel shall be provided as per price bid. However the same item is missing in the Price bid schedule. Kindly clarify the requirement.	
47	Vol-III of III, Section E42 - Tech. Specification for 500MVA Transformer, Clause 5.4.26 and 5.4.27.		As per the referred clause, Oil storage tank and Oil sampling bottles are indicated. Please add a separate line item in the BPS if the same need to be supplied under this contract.	
48	Type test validity		We propose type test reports not older than 10 years as on date of Bid opening, for all major equipments such as GIS, EHV cables, Power transformers & Outdoor AIS equipments. Please confirm.	As per technical specifications.

49	General - Bay Arrangement		Please note that for 220kV GIS, Bay arrangement in Single Line Diagram is not matching with the Layout. Please check and clarify the requirement.	Single line diagram and layout drawing are indicative for the bidding purpose only. So, both drawings shall be finalized during the detailed engineering stage by the Contractor.
50	General		Kindly confirm whether the LBB is acceptable as inbuilt feature of Busbar protection relay.	LBB can be as inbuilt feature of Busbar protection relay.
51	General		We presume that the Control & Protection Panels shall be housed in the Main control building. Please confirm.	Control & Protection Panels shall be placed in yard ac kiosks
52	General		Kindly provide the specification for the following: a) 48V SMPS charger b) Bus post insulator c) Truck Crane d) 33kV Power cable	Technical spec for the following are uploaded in website: a) 48V SMPS charger d) 33kV Power cable b) Bus post insulator- Pl. refer TS E20-CONDUCTOR,EARTH WIRE,INSULATOR c) Truck Crane- Pl. refer TS E30A 400_220_132kV Outdoor GIS Spec.
53	220/33kV Transformer Impedance Pattern		Kindly specify the impedance pattern for 220/33kV Transformer. Whether it is constant ohmic impedance type or constant percentage impedance type?	As per TS.
54	Modular Cable sealing system		Modular Cable sealing system is not indicated in BPS. In this regard, we request OPTCL to check the requirement of cable sealing system and include a separate line item in the BPS if required.	Bidders scope
55	EPABX & Telephone system		We are not envisaging any EPABX & Telephone system in the present scope of work. If required, please add a separate line item in the BPS and furnish technical specification for the same.	As per TS.
56	Dynamic short circuit withstand test for transformer		We understand that Dynamic short circuit withstand capability of 500MVA & 20MVA transformer can be proved by means of calculations, as no testing requirements are envisaged in the specification. Further, if test reports are required, we request OPTCL to accept Dynamic short circuit withstand tests conducted on similar transformers (both MVA & voltage) in line with IEC60076-5. If Dynamic short circuit withstand test need to repeated, then please inform all Bidders & include separate line item in the price schedule to quote special test charges.	As per TS.
57	PRP Architecture		Please confirm whether Parallel Redundancy Protocol (PRP) architecture is required for Bay Control Unit (BCU), Bay Control Protection Unit (BCPU), protective relays both at bay level and station level.	The SAS shall be in the PRP based. The relays should be compatible to redundant communication architecture and shall be complied with IEC 62439-3 standards of parallel redundancy protocol (PRP). Revised Technical specification for SAS uploaded.
58	Visual monitoring system		We do not envisage Visual monitoring system (VMS) for substations. Please confirm.	As per BOQ.
59	Order of precedence		In case of discrepancies between Technical specification, Drawing & Bid price schedule please clarify the order of precedence to be followed	As per SBD.
60	Remote end substation		We do not envisage any scope of work in the remote end substation. Please confirm	As per BOQ and technical specification.
61	Mandatory spare & special tools		Please confirm whether the following items are required: a) Mandatory spares for GIS & Transformer. If required, please provide the list of mandatory spares. b) Special tools for GIS & Transformer. If required, please provide the list of tools.	It shall be as per the technical specifications and BOQ.
62	Vol-III of III, Section E30A - 400/220/132kV - Outdoor GIS, Page 5 of 50, Cast-Aluminium		As per the referred clause, Internal surfaces (cast-aluminium) : Seveenax protective paint RAL 7038 (grey) Internal surfaces (aluminium wrought alloy): without surface treatment. We would like to inform you that the internal surface treatment and painting shall be as per manufacturer painting procedure. Please confirm.	Confirmed.
63	Vol-III of III, Section E30A - 400/220/132kV - Outdoor GIS, Clause 3, Page 8 of 50, Electrical Ratings		As per referred clause, Partial discharge level of complete bay shall be $1.5 \times U/V3 \text{ pC} < 5$. But as per Table 6 of IEC 62271-203, Upd-test = $1.2 U/V3 \text{ pC} < 5$. As the above clauses are contradictory please check and confirm the actual requirement.	Confirmed.
64	Vol-III of III, Section E30A - 400/220/132kV - Outdoor GIS, Clause 4.1.18, Page 14 of 50, Repair		As per referred clause, any failure shall be immediately signaled by the system's inherent self-supervision with clear description of the nature and the location of failure. But, as per manufacturer standard design, we do not envisage any inherent self-supervision feature. Please confirm acceptance.	Confirmed.

65	Vol-III of III, Section E30A - 400/220/132kV - Outdoor GIS, Clause 4.1.20 (e), Page 15 of 50, Earthing of Main Circuits		As per referred clause, "To ensure safety during maintenance work, all parts of the main circuit, to which access is required, shall be provided with facilities for connecting removable earthing device, after opening the enclosure, on the circuit element which is previously earthed via main earth switch". But Separate removable earthing switch is not envisaged for GIS. During maintenance, the earth switch can be operated to drain the charges. For every module, to undertake maintenance, respective earth switches shall be provided to drain the charges as mentioned below :- For Bus side DS module, Bus H-ES can be used. For GCB & CT maintenance, Bus side ES and Cable side ES of respective bay can be used. Please confirm.	Confirmed.
66	Vol-III of III, Section E30A - 400/220/132kV - Outdoor GIS, Clause 4.2.1 - Circuit Breaker, Page 16 of 50, S.No. 2 - Technical Particulars		As per the referred clause, for Circuit Breaker Number of operations permissible without maintenance: At no load 10000 At rated current 2000 At rated short-circuit breaking current 20. We understand that the number of Operation permissible without maintenance shall be in line with OEM recommended standard maintenance intervals for Circuit Breaker. In this regard, our OEM recommendation is to perform inspection after 10 interruptions at rated short circuit current and maintenance, if any that are required. Please confirm.	Confirmed.
67	Vol-III of III, Section E30A - 400/220/132kV - Outdoor GIS, Clause 4.2.1 - Circuit Breaker, Page 19 of 50, S.No. 9 - Operating Mechanism		As per referred clause, Low stored operating energy shall be detected as per following operations: 1. start spring charge motor 2. block auto-reclosing if stored operating energy is insufficient to complete a break-make-break operation 3. block closing if stored operating energy is insufficient to complete a make-break operation 4. block tripping if stored operating energy is insufficient to complete a break operation. But, GIS offered is of motor charged spring operated mechanism. Hence, the above mentioned clause is not applicable for GIS with Spring Operated Mechanisms. Please confirm.	Confirmed.
68	Vol-III of III, Section E30A - 400/220/132kV - Outdoor GIS, Clause 4.2.3 - Maintenance Earthing Switch, Page 20 of 50, S.No. 1 - General		As per referred clause, The common point of the two bus bars along with earth switch shall be designed and housed in a separate compartment so as to avoid complete shutdown of the system in case of maintenance required in any disconnecter. But, OEM's standard design for 220kV GIS is with 3 position DS switch with ES. Further, all mandatory interlocks will be provided from safety point of view. OEM do not recommend to place earth switch in the common point of the two busbars from safety point of view. We request your kind review and acceptance of our recommended configuration.	Confirmed.
69	Vol-III of III, Section E30A - 400/220/132kV - Outdoor GIS, Clause 4.2.4 - Fast acting Earthing Switch, Page 22 of 50, S.No. 3 - Operating Mechanism		As per referred clause, In case of failure of auxiliary supply, the mechanism shall have sufficient energy stored to perform at least one O-CO cycle. We understood that this requirement is only applicable for the operating mechanism of GCB and not for Fast Acting Earth Switches. In this connection, we understand that these descriptions of stored energy is not applicable for Fast acting Earthing switch. Please confirm.	Confirmed.
70	Vol-III of III, Section E30A - 400/220/132kV - Outdoor GIS, Clause 4.2.5 - Current Transformers, Page 24 of 50, S.No. 4 - Constructional Details		As per referred clause, The Current transformers incorporated into GIS will be used for protective relaying and metering and shall be of metal enclosed type. We wish to clarify that the CTs for 400kV and 220kV GIS are externally mounted CTs (Secondary Windings Mounted externally around the enclosure) from constructional point of view. We request your kind review and acceptance of our standard configuration which is widely accepted across many utilities.	Confirmed.
71	Vol-III of III, Section E30A - 400/220/132kV - Outdoor GIS, Clause 4.2.10 - Local Control Cubicle, Page 28 of 50, S.No. 1 - General		As per referred clause, The LCC shall be factory tested and shipped together with the bay as one transport unit. But, OEM standard philosophy for HV / EHV GIS for Utility applications is with Stand Alone LCP i.e not Skid Mounted on GIS Bay(s). In this regard, we understand that the LCC are shipped separately from the GIS Bays. Please confirm.	Confirmed.

72	Vol-III of III, Section E30A - 400/220/132kV - Outdoor GIS, Clause 4.2.15 - Arrangements, Page 31 of 50, Wiring		As per referred clause, The wiring must be carried out with stranded copper conductors of at least 7 strands. The size of the conductors shall be suitable enough for the expected usage, but it must not be less than 2.5 sq.mm. But as per standard manufacturing practice of OEM, we recommend to use stranded 1.5 sq.mm. wire considering the current carrying capacity and ease of termination. Please confirm.	Not confirmed. It shall be as per the technical requirements.
73	Vol-III of III, Section E30A - 400/220/132kV - Outdoor GIS, Clause 4.2.15 - Arrangements, Page 32 of 50, Voltage Transformer		As per referred clause, The cable from voltage transformers shall be terminated in the cubicles with removable fuses and shall be padlocked. The fuses are connected in such a way that the locking devices forbids access to the cells corresponding to the conductors from the voltage transformers. But, The cable from VT secondary shall be terminated at VT cubicle on terminal blocks. The VT box shall have provision for padlocking. However we recommend to use MCBs instead of removal fuses for VT. The MCB for VT shall be placed at LCC. Please confirm.	Confirmed.
74	Vol-III of III, Section E30A - 400/220/132kV - Outdoor GIS, Clause 4.2.16 - Low Voltage Cables and Control Cables, Page 33 of 50		As per referred clause, The size of the 1.1 kV XLPE/PVC insulated copper tape shielded control cables is more than 2.5 sq. mm. But, as per standard manufacturing practice of OEM, we recommend to use stranded 1.5 sq.mm. wire considering the current carrying capacity and ease of termination. Please confirm.	Not confirmed. It shall be as per the technical requirements.
75	Vol-III of III, Section E30A - 400/220/132kV - Outdoor GIS, Clause 4.2.19 - Testing and Commissioning, Page 35 of 50, S.No.4 - Power frequency test		As per referred clause, as on site testing of GIS the power frequency test voltage at site shall be 80% of the factory test voltage for 1 min at 100Hz. We would like to inform you that the frequency of the power frequency test shall be 50Hz or higher depending on the testing circuit and equipment condition at site. This is as per the generally followed and accepted practice followed during the post installation HV Test on Site. Please confirm.	Confirmed.
4. Mechanical Queries				
1	Price schedule point no. 31, FDA		Please confirm whether we need to consider Conventional or Addressable type Fire Detection & Alarm system.	Conventional.
2	Price schedule point no. 31 & 32		<u>Fire Detection & Alarm System</u> As per price schedule we will consider only for control Building and fire fighting pump house. We will not consider for store building guest house, staff building and security hosue. Kindly confirm.	As per BOQ and Technical specification.
3	Price schedule point no. 18.9, Fire Extinguishers - 50 L Mechanical Foam		Due to BIS Standard changes 50 L mechanical foam production stopped. As per new standard IS 16018 for all trolley mounted extinguishers. Mechanical foam fire extinguishers will be available in the following capacities 20,45,60&125L. We will consider 45 L capacity instead of 50 L as per price shedule quantity. Kindly confirm	Confirmed.
4	General - Ventilation system		Ventilation system requirement not given for Control Room Building and other. We will not consider any ventilation fans including toilets. Kindly confirm	As per Technical specification and BoQ.
5	Price schedule point no. 17. 2TR SPLIT AIRCONDITIONER		For 2TR SPLIT AIRCONDITIONER quantity given in price schedule is 20 No's. Whereas technical specification (PKG-3-Vol-III of III-E22-AIR CONDITIONER) clause No. 1.3 it is mentioned for 400/220 KV S/S CONTROL ROOM: 30 NOS 2 TR CAPACITY. Kindly confirm the quantity.	As per BOQ.
Sr. No.	Clause Reference	Clause Description	Bidder's Query	OPTCL's Reply
1	General	Project specific Scope of work	Please provide the Project specific scope of work.	Pl. refer SBD and BoQ
2	Volume-III / Part-I/3	The various drawings and schedules provided are apart of the specification and for informations purpose only.	Please provide the tender SLD, Overall electrical equipment layout & Plot plan .	Uploaded in OPTCL website.
3	Price schedule	schedule No-1 Plant supplied from Abroad (Substation) & schedule No-2 Plant supplied from Abroad (Substation)	We understand that Schedule-2 shall be applicable for Plant supplied from Employers country. Kindly confirm that our understanding is correct.	Confirmed
4	Price Schedule-1&2 Cl No./1/1.1	420 KV Feeder Module Bay	In GIS module 6nos. 1phase Potential transformer has been considered for GIS feeder module of each diameter and also 12 Nos AIS type CVT is consider in Price Schedule No./2/3.1. Please check and confirm the requirement of potential transformer in GIS module or AIS type CVT.	Amended BoQ uploaded

5	Price Schedule-1&2 Cl. No./1/1.1 & Price Schedule- 1&2 Cl No./36	420 KV 2000A 63KA for 3sec (Busbar, CB, disconnector, Grounding Switch, CT, & PT), SF6 gas insulated Complete diameter module (2 no's feeder).....= 3set & 400/220KV 500MVA transformer = 2nos.	From this clause we understand that 400kv GIS bay details as following: a) Line feeder GIS module- 4nos. B) ICT feeder GIS module - 2nos. C) Tie bay GIS module-3 Nos Kindly confirm whether our understanding is correct.	As per BOQ description.
6	Price Schedule-1&2 Cl No./2/2.2	220 KV Line Feeder Module Bay	In GIS module 3nos. 1phase GIS Potential transformer has been considered again in Price Schedule No./2/3.4 12nos AIS type CVT is considered . Please check and confirm the requirement of Potential transformer in GIS module.	Amended BoQ uploaded
7	Price Schedule-1&2 Cl No./2/1/1.2	420KV, 2000A 63KA for 3sec (busbar, disconnector, grounding switch & bus PT), 3phase isolated, SF6 gas insulated, metal enclosed busbars complete diameter module (2 no's bus PT)-----1 set	From this clause we understand that 1 set comprises 2 nos. bus bar module (Bus -1 & Bus -2 Module) and accordingly 6nos 1phase bus PT , 2nos Motorized 3phase disconnector, 2nos motorized busbar safety grounding switch are required . Kindly confirm whether our understanding is correct.	As per BOQ description.
8	Price Schedule-1&2 Cl No./2/2/2.3	220KV, 2000A 50KA for 3sec (busbar, disconnector, grounding switch & bus PT), 1phase isolated bus PT module comprising of SF6 gas insulated, metal enclosed busbars each enclosed in bus enclosures running along the length of switchgear to interconnect each of circuit breaker bay module. Each bus bar set shall be complete with single phase bus potential Transformer(4 winding) (3nos.), Motorised 3Phase disconnector (1no), motorised busbar safety grounding switch (1no)-----1 set	From this clause we understand that 1 set comprises 2 Nos. bus bar module (Bus -1 & Bus -2 Module) and accordingly 6nos 1phase bus PT , 2Nos motorised 3-phase Disconnector and 2nos grounding switches are required .Kindly confirm whether our understanding is correct.	As per BOQ description.
9	Price Schedule1&2 Cl No./2/3.8	216KV metal oxide surge arrester, 10KA long duration discharge class III, 10KJ/KV at 216KV as per Technical specification = 18nos.	As per Price Schedule No./2/2/2.2 4nos. Line feeder and 3 nos. ICT module bay is there and accordingly 21nos. Surge Arrester is required whereas in Price schedule same has been mentioned as 18. Please check and confirm.	Amended BoQ uploaded
10	Price Schedule 1&2 Cl No./2/19/3.3	TIE BREAKER PROTECTION PANEL with Bay Control Unit (BCU)for substation automation system = 4 nos	As per Price Schedule No./2/2/1.1 we presume that there are three number TIE bay is in present scope and accordingly 3sets of Tie breaker protection panel with BCU are required instead of 4nos mentioned in BPS. Please check and confirm.	Amended BoQ uploaded
11	Price Schedule 1&2 Cl No./2/14/14.1	Station Transformer 33KV /433V, 1000KVA (as per specification)	Pl. confirm the 33KV incoming supply scope details for 2 nos 1000KVA station transformer.	Arrangement as per indicative SLD.
12	Price Schedule 1&2 Cl No./2/4	33KV GIS Equipment	Please note that in tender document , technical Specification for 33KV indoor GIS is available. We understand that it is indoor GIS . Kindly confirm.	Yes.
13	Price Schedule 1&2 Cl No./2/4	33KV GIS Equipment	Our understanding on 33kv GIS is as follows :- 1. Double main bus bar arrangement system is considered 2. From 3nos transformer bays we understand that 1no. Bay for 220/33KV 40MVA transformer and 2 nos. bays shall be for 33/0.433KV station transformer. 3. 1 Bus coupler bay 4. bays for out going feeder (Line bays) is not considered in present scope of work. Kindly confirm whether our understanding is correct. also provide Single Line Diagram.	Arrangement as per SLD is indicative. The arrangement will be finalised during detailed engineering.
14	Price Schedule 1&2 Cl No./2/4.3	33KV cable termination kit including cable to air bushing suitable for 1C x 300sq. Mm. copper cable- 9 nos	we understand that out door. Cable termination kit for 1C x 300sq. mm. copper cable is 9nos and additional cable to air bushing is not required. These cable termination kit is required for cable termination at 220/33KV, 40MVA transformer and 33/0.433kv ,100KVA station transformer. Kindly confirm our understanding is correct.	Pl. refer amended BoQ
15	General	33kv Cable length	33KV cable item is missing in Price schedule. Kindly include the same in price schedule.	Pl. refer amended BoQ
16	Price Schedule 1&2 Cl No./2/19.3.4	Bus Bar Protection Panel (provision of bus bar modules for the future bays and to be integrated with the automation system)	Please provide Single Line Diagram showing no. of future bays to consider the provision for these bays in Bus bar protection module and SAS	Pl. consider one dia for 400KV and three bays for 220KV system.
17	Price Schedule 1&2 Cl No./2/20	AC & DC System	Please provide the OPTCL standard AC & DC SLD.	Pl. refer BoQ and Technical specification
18	General	Standard drawings	Please provide OPTCL standard drawings for Control room building, FFPH, transit camp and others building.	Engineering and design is under the scope of the Bidder. However, the related drawings available will be provided in the vent of award of the contract.
19	General	Earth resistivity	Please provide Soil resistivity report for Main mat estimation	Bidder's scope
18	General		Please confirm the Line side Insulator/Hardware/ Connectors are in the Scope of Transmission line Contractor or Substation Contractor.	As per BOQ.
19	General		Kindly confirm that the protection panel shall be located in control room building or in SPR/ Kiosk based room in yard.	AC Yard Kiosks.
20	Vol III, E29, Cl. No. 9.00.00	Fire fighting system	we understand that conventional type fire detection system is to be required for CRB. Please confirm.	As per BOQ.
21	Price schedule. Page 13, Sr. no. 28 & 30	HVWS and NIFPS	HVWS and NIFPS system is asked for the 500MVA transformer, but as per general practice, only one system is provided for transformer, either HVWS or NIFPS. We consider only HVWS system for 500MVA transformer. Please confirm.	As per BOQ.

22	Price schedule, Page 13, Sr. no. 28 & 35	HVWS system	HVWS and NIFPS system is asked for the 500MVA transformer, but for 40MVA transformer, TS is silent. We understand that HVWS system shall be applicable for 1 no. 40MVA transformer. Please confirm.	As per BOQ.
23	Vol II of III, clause 13.5	RTU with LDMS for remote communication + Laptop is asked	Since the Substation is IEC 61850 based Automation; there may not be a requirement of RTU with LDMS since gateway will compensate the requirements. Kindly confirm	Pl. refer amended BoQ
24	Vol III of III, Pg. No. 5/13, Cl. 3	Drawings attached with the Tender Documents	Bidder couldn't find any drawings along with the Tender documents. Kindly furnish the same for Bidder to study the same.	Engineering and design is under the scope of the Bidder. However, the related drawings available will be provided in the vent of award of the contract.

Sr.No	Clause No	Description	Query	OPTCL Reply
1	ITB 11.2 (I), Option A - Section II. Bid Data Sheet	The Bidder shall submit with its Technical Bid the following additional documents: 1. Details of Manufacturing / Fabrication / Service facilities of the Bidder or its Sub-Vendor / Sub-Manufacturer. 2. Type Test certificate of the Bidder or its Sub-Vendor/Manufacturer, of the Major items of Plant & Equipment (GIS Equipment with GIB, Transformers, CR panel, CT & PT, LA and Isolator) conducted as per EQC to be supplied under this contract. 3. Details of credential of Sub-Vendor/Manufacturer to be engaged under the Contract in satisfaction of EQC. 4. Details of credential of Sub-Contractor(s) to be engaged under the Contract in satisfaction of EQC	Collection and Submission of Type test reports for Major items of Plant & Equipment (GIS Equipment with GIB, Transformers, CR panel, CT & PT, LA and Isolator) will become too bulky to submit along with technical bid. We request to kindly accept an undertaking from us to submit the type test test reports & GTP after award of the contract. Please Confirm.	It is recommended to submit type test certificates/GTP of all major equipments as per SBD.
2	ITB 18., Option A - Section II. Bid Data Sheet	Bidders shall quote for the entire Plant and Installation Services on a single responsibility basis.	Please Clarify this is a Single or Divisible contract supply & Erection Contract	As per SBD & BOQ given. This is indivisible "Works Contract" covering supply of Material/Equipment/Spares, Erection, Installation & Commissioning and Associated Civil Works.
3	Option A - Section III. Evaluation and Qualification Criteria	Gas Insulated Switchgear (GIS) (Outdoor type)	We request to kindly accept an undertaking from us to submit the type test test reports from after award of the contract.	As per SBD
4	2.5 Subcontractors/manufacturers	Substation Automation System (SAS) and Protection Relays		As per SBD
5		Commissioning of the works as per BOQ		As per SBD
6	Section IX. Contract Forms Bank Guarantee Form for Advance Payment	[Note: For Bank Guarantee (BG), the following listed banks/branches may be considered for OPTCL convenience. 1) Union Bank Of India 2) State Bank of India 3) Uco Bank 4) United Bank of India 5) Axis Bank 6) IDBI Bank Ltd. 7) Andhra Bank 8) Syndicate Bank 9) ICICI Bank Ltd. 10) Bank of India	Please confirm the Bank along with following Details for Arranging EMD on SFMS platform 1) Beneficiary Account no. 2) IFS Code 3) Branch Code, 4) Branch Address.	ICICI Bank Bhubaneswar, (The Unique Identifier for field 7037 is "OPTCL541405793") IFSC Code ICIC0000061. Branch Address: ICICI Bank Ltd Bhubaneswar Main Branch, Bhubaneswar
7	ITB 22.1, Option A - Section II. Bid Data Sheet	In addition to the original of the Bid, the number of copies is: two (2)	We request you to please accept the original + 1 Copy for ease of submission	As per SBD.
8	Option A - Section III. Evaluation and Qualification Criteria Clause -3 of 2.5 Subcontractors/manufacturers	400kV & 220kV GIS shall have to be supplied from the same manufacturer.	Since approved vendor for GIS equipment is not mentioned in the <i>Appendix 5. List of Major Items of Plant and Installation Services and List of Approved Subcontractor</i> , We request you to please accept <i>Separate Manufactures for econmic bidding.</i>	As per SBD and technical specifications.
9	Appendix 5. List of Major Items of Plant and Installation Services and List of Approved Subcontractors	Approved Vendor List	Approved Vendor List for GIS & 400/220kV , 500MVA Auto Transformer is missing, please provide the same information.	The Manufacturer for Ourdoor Gas Insulated Switchgear (GIS) and 400/220kV, 500MVA, ICT must meet the requirements specified in the SBD and Technical specification.
10	General	8.3 To give Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Employer may extend the deadline for the submission of Bids, pursuant to ITB 24.2.	In line with this clause, we request you to please extend tender closing date for 3 weeks on the basis voluminous documentatation and work involved with bid preparation.	Extension if any will be notified and uploaded on OPTCL website accordingly.
11	General		We under stand that Land Aqisition for site is completed by the Employer. Please Confirm	Yes.

12	General		Electrical Inspector fee if any to be paid for commissioning of line will be to the account of Employer. Please Confirm	Getting electrical inspector to inspect the plant and equipment is the responsibility of the Contractor. OPTCL shall endeavor to facilitate for getting electrical inspector to inspect. However, the statutory fees shall be reimbursed by OPTCL.
Sl. No.	Ref Section/ Ref Clause No.	Specification	Specification	Queries
1	Volume 1/ 2.4.2(a) & 2.4.2(b)	Experience under contracts in the role of prime contractor (single entity or JV member) (i) within the last seven (7) years, at least one (1) contract for the design, supply, installation and testing & commissioning of new 400kV or higher voltage level GIS substation with minimum five (5) bays on turnkey basis. Evidence of above experience shall be submitted in the bid which will be in the user's respective letterhead stationary indicating address, telephone and fax numbers of the user and shall include Name of the project, Name of the Employer, Description of the work, Commissioning date and Contract amount. The above contract(s) shall be in successful operation for minimum of one (1) year as on the date of BIT. The above experience shall be supported by end user's certificates in their letterhead indicating their address, telephone & fax number and details of project (i.e. name, address & nationality of customer, details of Contract, voltage & equipment, completion period, commissioning date, commercial operation date, Contract value).	We are GIS manufacturer from China and would participate in a JV with Indian EPC partner. Does this experience need to be fulfilled by our EPC partner or us as a manufacturer partner..?	As per SBO, this specific requirement needs to be fulfilled by all parties combined in case of a JV.
2	Volume 1/ 2.5 (Item No.1)	Bidder shall furnish copies of ISO 9001:2008 or equivalent certificates issued by an authorized agency of each of proposed manufacturer's factory. Bidder shall furnish the evidences of outdoor type GIS with the same specification or above with a minimum of fifteen (15) years of experience in successful outdoor operation. Evidence of satisfactory service mentioning the following information shall be issued by the end user on respective letterhead stationary indicating address, telephone, contact e-mail address and fax numbers of the end users: a) The project/contract name & number (with date of contract & project duration) against which these equipment has been supplied & installed, b) Substation name where GIS has been installed, c) GIS voltage level d) Capacity (continuous current rating & short circuit current rating) e) Date of commissioning f) End user's signature and issuing date in their letter Bidder shall furnish the satisfactory type test reports on a similar type GIS with the same specification or above, manufacturer by the proposed factory. Bidder shall furnish the evidence that gas leakage rate for GIS shall be less than 0.1% / year.	Does this criteria needs to be fulfilled by us as GIS manufacturer as a JV partner of EPC Partner?	This criteria needs to be specifically fulfilled by the vendor/manufacturer of the GIS equipment for the project.

P. S.
12/9/19