

**PRE BID QUERIES AND ITS CLARIFICATION ON CONSTRUCTION OF 2X40 MVA (220/33 KV) 220/33 KV GAS INSULATED (SF6) SUBSTATION AT INFOCITY-II, BHUBANESWAR & ASSOCIATED 220 KV DC LILO LINE ARRANGEMENT ON ONE CIRCUIT OF THE EXISTING NARENDRAPUR-MENDHASAL DC LINE ON TURNKEY BASIS.**

**(1) PRE BID CONFERENCE HELD ON DATED :30.08.2012:**

**(2) NIT No.25/2012-13: TENDER SPECIFICATION : SR. G.M.-CPC-TENDER-PACKAGE-GIS SS INFOCITY-II-26/2012-13**

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
<b>ABB'S OBSERVATION ON PRE BID FOR 220/33 KV GIS</b>							
1	II	Part -3	Drawing	18	Single Line Diagram	The single line diagram specified in the tender document doesnt specify the protection and metering. Further the details of 33KV GIS is also not specified. Kindly forward us the Protection and metering SLD of 220KV and 33KV GIS.	Please refer the relevant technical specifications of OPTCL issued as part of tender documents.(Ref Vol-II-Part-I,E21 & Part-III-Drg). The required single line diagram for 220 & 33 KV side are enclosed.
2	II	Part -1	GENERAL CLAUSES	4 of 16	Supply of non specified equipment/service during execution of contract	We shall quote as per the Unit items specified the Price schedules. Further any new items arises for the completion of the project, we shall supply based on the mutual agreed rates.	In case of any extra items identified during execution of the contract, which are not covered in the specification & BOQ, shall be mutually discussed & finalized. As per the clause No. 24.2 of the Condition Of Contract-Vol-IA-GCC.
3	II	Part -1	GENERAL CLAUSES	4 of 16	PTCC clearance	Our scope excludes PTCC clearance for Transmission Line. However we shall provide all the technical drawings required for the same limited to our scope of works inside the substation. Please confirm your acceptance.	PTCC clearance shall be obtained by OPTCL. However necessary supporting documents shall be provided by the contractor.
4	II	Part -1	GENERAL CLAUSES		Training	All the charges/expenses such as Air tickets, Local conveyance, Boarding and Lodging, Out of pocket expenses, VISA charges or any other expenses towards any type of Inspection, training etc shall borne by OPTCL. Please confirm your acceptance.	1) 10 Nos. Engineers of OPTCL will be given GIS Training for 15 days. (2) If the training is to be given outside India, to & fro, first reaching the country (outside India) & from Outside India to India, shall be borne by OPTCL & all other expenses shall be borne by the Agency.(3) If the training is given inside India the to and fro and lodging expenses shall be borne by OPTCL and all other expenses shall be borne by the Agency.
5	SUBSTATION AUTOMATION SYSTEM						
6				92 of 98	Typical Architecture Drawing of Substation Automation System	Typical SAS Architecture diagram provided as a part of technical specification is clearly not visible. We request you to provide the architecture diagram which is clearly visible.	It is only indicative (Vol-II-Part-I,E21) architecture of SAS system. However the Firm may free to furnish the said architecture, which shall be finalised during detailed Engg.
7			1.2 (Under 1.0 General)	59 of 98	Technical Specification for 1) CONTROL, RELAY & PROTECTION PANELS 2) SUBSTATION AUTOMATION SYSTEM 3) AC KIOSK	1) Our scope shall be limited upto ensuring the availability of data at RSCC. Engineering or modification of existing RSCC will not be in our scope. Necessary support required for integration will be extended by us.	All the IED's will be IEC 61850 compliant, which is a open protocol. So remote communication can be adopted in future. Provision can be made accordingly. At present there is no remote operation system.(RSCC)
8			4.1 (Under 4.0 System hardware)	73 of 98	It shall be capable to perform all functions for entire substation including future requirements as indicated in the SLD.	We understand that the requirement mentioned in this clauses are in general and not specifically applicable for this project as there are no future bays shown in in the SLD. Please confirm.	SAS is required for the existing scope for the sub-station. Provision should be made for future expansion of bays. Integration provision for future expansion should be there in the SAS system.

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9			2.1 General system design	60 of 98	Bidder shall offer the Bay level unit (a bay comprises of one circuit breaker and associated disconnecter, earth switches and instrument transformer), bay mimic along with relay and protection panels and PLCC panels (described in other sections of technical specifications) housed in air-conditioned Switch yard Panel Room suitably located in switch yard and Station HMI in Control Room building for overall optimisation in respect of cabling and control room building.	We understand that Air conditioned kiosk mentioned in this clause not applicable as the Control & Relay Panels will be mounted in Control room building as specified under tender document : Vol-IIA Scope of Work Clause No.2 (xi). Kindly clarify.	The relay panels & Bay control units are to be installed in the control room building.
10			4.2 Bay level unit	74 of 98	The bay control unit for future bay (if required as per section project) shall be installed in a separate panel.	We request you to furnish the "section project" mentioned in this clause. In case of non availability of "section project" we shall be offering bay control units for the present bays only. Please confirm.	Offer should be for the bays in present scope.
11			3.1.2. Bay protection functions	64 of 98	The protection functions are independent of bay control function. The protection shall be provided by separate protection IEDs	We shall offer combined Bay control cum protection IEDs (BCPUs) for 33kV meeting the specification requirement. Please confirm your acceptance for the same.	Combined Bay control cum protection IEDs for 33kV meeting the specification requirement also acceptable.
12			3.1.1. Bay control functions	63 of 98	Local HMI (local guided, emergency mode) Interface to the station HMI.	Local guided control is not available in the Bay Controller HMI. Operator's Assistance shall be part of station HMI.	Besides Local guided HMI, the station HMI will provide assistance to operation
13			4.4 Extendibility in future	76 of 98	The contractor shall provide all necessary software tools along with source codes to perform addition of bays in future and complete integration with SAS by the user.	We shall provide necessary software tools only, software source code will not be provided as it is proprietary in nature and a property of ABB.	As per tender stipulation, software service code to be provided.
14			12.0 RELIABILITY AND AVAILABILITY	85 of 98	2) Actual outage duration (AOD)	Please note that Actual Outage Duration (AOD) should be calculated for accumulated value of down time instead of nearest 1/4th of an hour during the test period.	The outage shall be recorded on actual basis.
15			12.0 RELIABILITY AND AVAILABILITY	85 of 98	12.1 Guarantees Required	Guaranteed Availability shall exclude peripheral devices (functionally non-critical components) like Printer, Monitors, Keyboard, Mouse etc. In case of redundant components like servers, Main 1/Main 2 IED etc. failure of one component will not be regarded as failure for Availability calculations.	As per tender condition.

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16			Tender Document (BPS Excel format) Unit Price Break-up of Ex-Works	13 of 16	<p>24.1 : SUB-STATION AUTOMATION SYSTEM (COMPRISING OF 02 Nos. FEEDER BAYS + 02 TRANSFORMER BAYS + 01 Nos. BUS COUPLER BAYS)</p> <p>24.2 : BCU FOR CONTROLLING AND MONITORING OF AUXILIARY SYSTEM &amp; OTHER ACCESSORIES (COMPRISING SERVERS, ENGGSTATION, WORKS STATION, UPS etc (TO BE LOCATED IN THE CENTRAL CONTROL ROOM) FOR BOTH 220 &amp; 33 KV SIDE OF THE GIS SUB-STATION. As per Technical specification.</p> <p>24.2.1 : SUB-STATION AUTOMATION SYSTEM (COMPRISING OF 05 Nos. FEEDER BAYS + 02 Nos. TRANSFORMER BAYS + 01 Nos. BUS COUPLER BAYS + 01 Nos for Station transformer 2X315 KVA 33/0.43 KV ) bays</p>	<p>Substation automation system will be common for both 220kV and 33kV. Hence we request you to amend the price schedule line items Sl. No. 24.1.1, 24.1.2 &amp; 24.2.1 into a single line item "Substation Automation System".</p>	<p>SAS for 220 KV &amp; 33 KV shall be common. Revision of BPS is made accordingly.</p>
17			4. Panel Internal Wiring & 5. Terminal Blocks	6 of 98	<p>Under Clause 4: The sizes of wiring in different circuits shall not be less than those specified below :</p> <p>Table – I</p> <p>Circuit Minimum permissible Size of wire.</p> <p>Metering and relaying circuits connected 4.0 mm sq.</p> <p>to Current Transformers.</p> <p>Potential circuits for metering and 4.0 mm sq.</p> <p>Relaying,</p> <p>Other control, visual and audible 2.5 mm sq alarm signalling circuits etc.</p> <p>Under Clause 5: 5.4. Unless otherwise specified, terminal blocks shall be suitable for connecting the following conductors of external cable on each side</p> <ul style="list-style-type: none"> <li>All CT &amp; PT circuits: minimum of two of 2.5mm Sq. copper.</li> <li>□ AC/DC Power Supply Circuits: One of 4 mm Sq. copper.</li> <li>□ All other circuits: minimum of one of 2.5mm Sq. Copper</li> </ul>	<p>Wiring shall be as mentioned below which is as per our manufacturing standard and meets the system requirement.</p> <ul style="list-style-type: none"> <li>- CT Circuits: 2.5 Sq mm</li> <li>- PT Circuits: 1.5 Sq mm</li> <li>- PT Circuits (Energy Metering) : 2.5 Sq mm</li> <li>- Control Circuits: 1.5 Sq mm</li> </ul> <p>Same has been accepted in all major utilities like PGCIL, NTPC etc including OPTCL.</p> <p>We request your acceptance for the same.</p>	<p>As per Tender Specification.</p>

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18			11,12 ,14,15 & 16	10 of 98	Please refer the Technical Specification as mentioned in the Reference Column.	We understand that the requirement mentioned in these clauses are in general and not specifically applicable for this project as we are not offering any conventional control panels in the present scope. Control, Indication and measurements are part of Bay Control Unit as per the technical specification. Please confirm.	Yes, conventional control panels are not required. Control,indication & measurement are part of Bay Control Unit.
19			26.3 (m)	33 of 98	shall include necessary C.T. switching relays wherever C.T.switching is involved and have 'CT' selection incomplete alarm	For biased differential bus bar protection there is no need of any switching of CTS externally to Bus bar Relay, Switching from one zone to another zone is done on soft logic through isolator status.	Yes, No need of any CT switching for Bus Bar relay. It should be done through soft logic for selection of bus through isolator position.
20			26.3 (o)	34 of 98	shall include trip relays, CT switching relays (if applicable), auxiliary CTs (if applicable) as well as additional power supply modules, input modules etc. as may be required to provide a Busbar protection scheme for the complete bus arrangement i.e. for all the bays or breakers including future bays as per the Single line diagram for new substations.	We shall offer bus bar protection for the present bays only as there are no future bays shown in the SLD. Please confirm.	Yes. But should have provision to integrate with the future bay extension.
21			27	34 of 98	This panel shall include necessary number of electrically reset relays each with at least eight contacts for isolator auxiliary contacts multiplication and for changing the CT and DC circuits to relevant zones of bus bar protection.	We understand that weather proof relay panels mentioned in the specification is not applicable for this project. Please confirm.	All outdoor panels are to be weather proof and indoor panels may not be. But as per technical specification for panels are to be scrupulously followed.
22			32	45 of 98	One relay test kit shall comprise of the following equipment as detailed here under : 3 sets Relay tools kits 2 nos. Test plugs for TTB 2 nos. Test plugs for using with modular type relays ca se s (if applicable)	Kindly clarify whether we need to offer relay test kit as specified in this clause since same has not been called in the tender price schedule.	Yes, a universal relay test kit suitable for different type of microprocessor based digitalised relays and metering system and other tools and plants as indicated.(Vol-II-TS-E21)
23			34	46 of 98	C O N T R O L P A N E L:Various Types of Control Panels shall consists of the following	We understand that the requirement mentioned in these clauses are in general and not specifically applicable for this project as we are not offering any conventional control panels in the present scope. Bay level control will be part of Bay Control Unit as per the technical specification. Please confirm.	Conventional control panels are not required. Control,indication & measurement are part of Bay Control Unit.

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24			34 (Line Protection Panel)	49 of 98	3 Phase Trip Relays for LBB scheme 1 Nos	As per technical specification, we are offering LBB as part of Bus bar protection. Hence bus bar relay trip relay itself will used for LBB tripping also. Please confirm	Yes, LBB protection as part of Bus bar protection.
25			40	52 of 98	As per the customers requirement. All 400 and 220 KV substation shall have separate Event Logger panel provision	Event logging will be part of Numerical relay (Usually each Main numerical will store around 1000 Events with resolution of 1ms) and this events will also be stored in SAS system, hence their is no need any Event logger please confirm.	Event logger panel is required.
26	2.0 Brief Scope of work: Package - 23 /2012-13. (GIS INFOCITY)				Line length of 220kV Transmission Line	We understand that the line length of 220kV D/C Transmission line is only 2 kM which falls under short lines. Hence distance protection may not be able to sense the fault. We recommend for Main 1 & Main 2 Line differential protection of same make instead of distance protection mentioned in technical specification. Please confirm your acceptance for the same.	220 KV Transmission line is taken to the GIS sub-station by way of making LILO arrangement on the existing Narendrapur-Mendhasal Line. Therefore Line distance protection will be suitable and hence to be considered. Main-I & Main-II line distance protection to be provided.
27						Remote end Line Differential relays (Main 1 & Main 2) for each 220kV D/C line has to be procured in the present scope only as a loose supply since both local and remote end line differential relays should of same make and type for proper functioning of the differential protection scheme. Please confirm.	Not required.
28						We understand that remote end line control & relay panels at Narendrapur (Near Mendhasal) is already existing hence we request you to provide us the existing 220kV line panel drawings to enable us to check the feasibility of mounting the line differential relays being supplied in the present scope.	Not Applicable since line differential relay will not be used.
29		HT Switchgear					
30	II		GIS System E30 - Cl:8.1.3	41 of 65		Vacuum monitoring devices are not available for use in industry market & hence not in our scope of supply. Isolation of interrupter unit is possible through repair windows.	Bidder are requested to propose the alternative arrangements possible to monitor vacuum levels.
31	II		GIS System E30 - Cl:8.2.5-8	45 of 65		Disconnecter & Earthing switch is operated by motor operation & not be stored energy type. Completed operations are always ensure by means of reed contact & limit switches. This logic ensure no operation is possible if the disconnecter or earthing switch is not fully engaged & also prohibit all further operations until complete contacts are made.	Yes, the disconnecter & Earthing switch shall not be of stored energy type, but shall be motor operated.
32	II		GIS System E30 - Cl:12-2	54 of 65		The interconnection of bus bars between bays is through plug-in design. Complete shut-down of the bus bars are necessary while coupling or decoupling of individual bay module. This does not involve gas work at site & hence take minimum downtime.	As per requirement, future extension should be possible with the outage of only one bus section.
33	II		E30 - Cl:5.2 Pg: & Cl:8.5.1-5 & Cl:21	40 of 65, Pg:57 of 65, Pg:48 of 65		Design ambient temperature shall be 40°C as indicated in GIS system specification page 48 of 65. If in case 50°C ambient is envisaged, then a berating factor is to be considered. Accordingly, 1250A CB shall be capable to handle 1164A. As the maximum current as per system requirement is 800A, the berated CB of 1164A is highly adequate. Similarly 2000 A bus bar rating shall carry 1862 A at 50°C ambient temperature.	Design Ambient shall be considered as 50 Deg C in line with OPTCL Specification

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34	II		E30 - Cl:8.3	Page: 33 & 34		CT's shall be Outer cone bushing type tape wounded LT CT. As technically it is not feasible to provide a ratio of 400-200-100/1A, we shall provide 400-200/1A. Similarly 800-400/1A shall be provided instead of 800-400-200/1A. Accuracy & Burden & Knee Point voltage details etc shall be calculated based on actual requirement during detail engineering as indicated in Vol-II GIS system E30 & also in Cl:21 page: 57 of 65.	CTs construction shall be subject to OPTCL approval during detailed design stage. CT Ratio details shall be referred to 33kV SLD. There shall be three CT ratios as per specification. However the CT details shall be finalized during design stage.
35	II		Technical Specification			The Bill of Quantity (BOQ) mentioned in BPS does not match with Scope of work (SOW) for the Spare Feeders. In BOQ 1no spare feeder is asked whereas 2nos spare feeder is called for in SOW. Kindly clarify.	In the BPS, the Feeders quantity shall be considered as under: 1. Item no. 2.1 – 33 KV Transformer feeders - 2 Nos. 2. Item no. 2.2 - 33 KV Feeders - 7 Nos. 3. Item no. 2.4 - 33 KV Bus Coupler - 1 No. 4. Item No. 2.5 - 33 KV Station Transformer feeder stands deleted.Total No. of Circuit Breakers Bays - 10 Nos. (one of the feeder bay can be utilised for station transformers (2X315 KV/200/100))
36	II		GIS System E30 - Cl:1.1	39 of 65		Inspection & testing of GIS shall be offered at ABB, Vadodara works. All related costs such as boarding & lodging shall be on purchaser's account	Yes, if it is inside India.
37	II		E30 - Cl:7	40 of 65		Three Phase enclosed, Double Bus bar system is considered.	The module shall be (1) <b>Single phase/Three phase</b> encapsulation for 220 KV Side GIS & (2) <b>Three phase</b> encapsulation for 33 KV side GIS.
38	II		E30 - Cl:8.1.1 -3	41 of 65		Interrupter assemblies are of fixed type. In case of fault the same can be rectified/replaced through repair windows provided for each cubicle.	Noted.
39	II					Kindly clarify: Protection - Kindly specify the protection features envisaged in each module. Metering - All metering is through Relays & no separate meters are considered. Also kindly indicate the Communication Protocol details with type of port.	For protective relays please refer to clause 18 of Vol-II,E-21 of OPTCL specification. Separate digital meters shall be provided for individual phase. IEC 61850 is the required communication protocol. The Gateway shall confirm to open protocol i.e, IEC 60870-5-101 protocol for gateway to remote station and shall confirm to IEC 61850 open Protocol for Bay to station HMI. However, the type of port shall be subject to OPTCL approval during design stage.
40						Kindly clarify the requirement of Surge Arrestors in each module type.	Please refer to clause 8.4 Vol-II-TS-E-30 of OPTCL specifications. The details shall be finalized during detailed engineering. All Surge Arrester (SA) shall be installed outside as per AIS.
41						Kindly provide us the cable data & number of runs per phase.	The cable details shall be finalized during detailed engineering. Bidder are requested to quote as per their estimates.
42						SLD is not provided for 33kV GIS as mentioned in specification. Kindly provide the same.	The Single line Diagram for 33KV GIS system is enclosed.

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43			GENERAL CLAUSES			Kindly Provide the detailed Power Cable Specification for 220 & 33kV Voltage Levels.	33 KV Cable specification is enclosed. 33 KV XLPE armoured single core, 800 Sq mm copper Cable to be used. (1) From 33 KV side of the Power Transformer to the 33 KV GIS cubicle. (2) 33 KV XLPE armoured three core, 95 Sq mm copper Cable to be used. From 33 KV GIS cubicle to 33 KV side of the Station Transformer.
44			GENERAL CLAUSES		Bus bar & Circuit Materials	For 220kV & 33kV Termination Kits are shown in BOQ,Please Clarify the same.	(1) 220 KV Cable termination kit is not required as there will be no requirement of 220 KV Cables. (2) 33KV side XLPE cables are to be terminated at transformer end and also at GIS cubicle end. Quantity and type of such termination kit to be decided by the bidder as per the arrangement they
45			Schedule2A PART I (SubStation)	5 of 90			
46	II		E-30 Modular Design	4 of 65		As per the present practices and global acceptance 3 phase is better than 1 phase. We are attaching the presentation regarding the advantage of 3 Phase over 1 Phase and hence we request you to amend the specification that of three modules for 220kV as per this modular design clause.	<i>The module shall be (1) Single phase/three phase encapsulation for 220 KV Side GIS &amp; (2) Three phase encapsulation for 33 KV side GIS.</i>
47	II		Shade	5 of 65	RAL 5018	We kindly request you to accept RAL 7038. Please Confirm your acceptance	The Internal painting of GIS enclosures shall be as per manufacturer standard practices, However the external paint shall be in line with OPTCL requirements.
48	II		Gas	6 of 65	The leakage rate is less than 0.5% SF6 per year	We are offering leakage rate less than 0.2% SF6 per year which is better and request you to kindly amend the specification.	The leakage rate shall be in line with OPTCL specifications, which is as per IEC-62271-203.
49	II		Note	6 of 65	The bus of the 220kV & 33kV GIS system shall be of copper.	GIS is designed to carry 3150 Amps and 50kA short circuit .The bus bar also forms certain parts of the bus bar disconnecter and thus its not practical to use copper. We take care of conductivity temperature rise with appropriate size of AL alloy bus bar ,which is required to withstand high forces during short circuits. End Connections are silver plated copper. Copper bus bar cannot be provided. Hence request you to kindly amend the specification with Aluminium conductor bus bar Please Confirm.	220kV GIS is with Aluminium Bus bars of rated current rating 2000 Amp at 50 deg centigrade ambient and should have been type tested for short circuit current of 40kA.
50	II		Services to be provided by the tenderer	7 of 65		We request you to amend that the 220KV GIS shall be 3 phase encapsulated design. As the 3 Phase 220KV GIS design shall be very easy for shipping the whole bay ,pre fabricated and pre tested .This way we only need to open single gas compartment to connect the bays together This is important for the purchaser ,as opening too many compartments in the uncontrolled environment of site ,increases the possibility of foreign ingress and failure. Kindly accept only 3 phase encapsulated design GIS and amend the specification accordingly.	<i>The module shall be (1) Single phase/three phase encapsulation for 220 KV Side GIS &amp; (2) Three phase encapsulation for 33 KV side GIS.</i>

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51	II		2.0 Electrical ratings	8 of 65	The 245kV GIS shall be single phase	The clause is conflicting with the Modular clause ,(where three phase and single phase GIS are acceptable).We would like to inform that all the utilities in India including PGCIL ,accept the three phase encapsulated GIS. Hence kindly amend the specification with 3 Phase design. Please Confirm your acceptance.	<i>The module shall be (1) Single phase/three phase encapsulation for 220 KV Side GIS &amp; (2) Three phase encapsulation for 33 KV side GIS.</i>
52	II		3.1 General	9 of 65	The GIS shall be made of tubular Aluminium alloy	None of the utilities in India except steel enclosure. Steel is heavy and prone to corrosion,thus its use no longer exist and allowed in most advance utilities in the world. Even Major utilities like PGCIL, etc and other major utility are accepting only Aluminium alloy design only. Having the option of steel enclosure the competition cannot be compared. Hence request you to kindly amend the specification to accept only Aluminium alloy design only.	The GIS enclosure made of tubular Aluminium alloy shall be acceptable in line with OPTCL specifications. However, if any component, other than the enclosure of GIS can be of steel if required so.
53	II		3.1.1 Sectionalize	10 of 65	Pressure relief devices shall be used wherever required	Each gas compartment shall have pressure relief devices,density monitor and NRV to fill the gas. "where ever" should not be acceptable to the customer. It is impossible to check where ever. Please amend the specification that the pressure relief devices shall be standard and not where ever. Please amend the specification.	Pressure relief devices,density monitor & NRV shall be provided.
54	II		3.1.2 Conductor	10 of 65	Conductors shall be made of copper	GIS is designed to carry 3150 Amps and 50kA short circuit .The bus bar also forms certain parts of the disconnecter and thus its not practical to use copper. We take care of conductivity temperature rise with appropriate size of AL alloy bus bar ,which is required to withstand high forces during short circuits. End Connections are silver plated copper. Please Confirm your Acceptance of Aluminium alloy busbar.	<i>The Bus bar conductors made of Aluminium having type tested with short circuit current rating 40 KA for 3 sec</i>
55	II		3.1.3 Support Insulators & section barriers	10 of 65	All insulators are free of partial discharge at a voltage which is at least 10% higher than the rated voltage	Free from partial discharge is not measurable .Customer should insist for 2PC at 10% higher than voltage says 5PC. Please Confirm your Acceptance and amend the specification accordingly.	<i>Maximum permitted PD level shall be as per IEC 62271-203 standard.</i>
56	II		3.1.5 Gas Seals	11 of 65	All gas seals located in the flanges of the equipment enclosures shall be of the O-ring type	It is important to have higher surface area of "O"ring to prevent gas leakage. we use "O"ring won polygon surface ,which gives higher surface area. Please provide your acceptance.	The gas seals shall be in line with OPTCL specifications.
57	II		3.1.14 Expansion Joints	12 of 65	Expansion & installation alignment shall be considered in the design of the bus & enclosure	It is important that these expansion joints are provided with each bay. This gives maximum tolerance and the flexibility during the installation ,maintenance customer is not asking these joints for each bay than it becomes very difficult to check whether sufficient joints are provided by the supplier,because it is design specific calculation. Please Confirm your acceptance.	Expansion joints to be provided with each bay.



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58			Safety			In line with ABB's policy, we shall ensure compliance with our OHS standards as a minimum on site, that is complying with well known international standards being ILO Safety and Health in construction ISBN92-2-107104-9, Operation of electrical installations EN 50110-1 Commission (IEC) 61482. Please confirm whether M/s OPTCL has got any other OHS standards to be followed at site. If yes, please arrange to forward for our reference.	Adopt a standard National/International safety duly adopted in GIS sub-station.
59			Safety			You are requested to bring to our notice any site specific hazard(s) that may affect ABB's employees or its contractors during the execution of the work on site. As per our assessment of following listed specific hazards, we do not find any hazards in the proposed green field project. <ul style="list-style-type: none"> <li>- Presence of asbestos materials within the proposed working area;</li> <li>- details of other legacy issues such as presence of poly chlorinated biphenyl (PCB's) in old electrical equipment such as transformers, lead and other heavy metals etc.</li> <li>- other ground contamination where excavation work may be carried out;</li> <li>- location of any live electrical conductors that will remain energised throughout the execution of the work on site;</li> <li>- location of any areas where there is a significant concentration of flammable liquids or vapours likely to be present.</li> <li>- details of any areas where there are hazardous substances present that may present a risk to ABB employees or its contractors;</li> <li>- details of any radiation hazards likely to be encountered;</li> <li>- location of any pressurised systems, pipelines that may be located within the proposed working area;</li> <li>- location of any underground services that may be encountered during the work.</li> </ul>	No specific hazards which may affect the contractors employees.
60			Safety			We reserve the right for the purpose of health and safety requirements to create a "site" physically demarcated within which ABB can exercise control, and in particular prevent access by unauthorised persons, including the client's personnel particularly during high risk activities such as erecting steel works, testing and commissioning. Please confirm.	As per standard practice.
61			Safety			We request you to appoint a representative to liaise with the ABB Responsible/site manager on matters relating to OHS and general progress during project execution. Please confirm.	Site In Charge of OPTCL will take care.
62			Safety			We shall have the power to exclude any person, including client, from the site under ABB responsibility, after reasonable warning, if that person is deemed to be non compliant with the requirements of this instruction, and/or are working unsafely and we shall not be liable for any consequence of these acts. Please confirm.	Will be adopted as per standard practice adopted in OPTCL.

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63			Safety			Our representative/site manager shall have the power to stop work on site under ABB responsibility at any time if of the opinion that the person is working unsafely, or where there is a significant risk to others who may be affected by the work or to the environment, or is in direct contravention with the requirements of this instruction. In such circumstances ABB shall not bear any costs that may arise as a result of not being able to complete the work at the time. Please confirm	To be Mutually decided by ABB & OPTCL.
64			Safety			In case of any local problems from labour unions / banned outfits, employer shall intervene and arrange to sort out issues with the concerned. Also, all extra costs and extra time required for the same shall be employer's account. Please confirm	As per tender condition provided.
65					CIVIL WORKS		
66			Civil works		BOQ of Civil works	We shall quote strictly as per the BOQ/Unit rates specified in the prices schedules specified in the BOQ of civil works. Any quantity variation shall be executed at extra cost subject to a maximum of 15% of the BOQ quantity	As per tender condition provided. Quantity variation is unlimited. Ref Vol-IA-Cond of Contract-SCC Cl 9.
67			Civil works		Piling works	We don't envisage any piling foundation in our scope of works. In the event if OPTCL required any piling works the same shall be executed at extra cost at mutual agreed rates from OPTCL.	Bidders to note that in line with Clause 1.1 of Volume-II Technical Specification E6 - Civil Works, Any other items, not specifically mentioned here but required for the commissioning of switch yard/substation shall be deemed to be included in the scope of this Specification. No extra payment shall be made by OPTCL in this regard.As per Vol-II A -2(D) Scope of work the bidder to visit the site and assess the nature of foundation.
68			Civil works		Special foundation	We don't envisage any type of special foundation in our scope of works. In the event if OPTCL required any type of special foundation works the same shall be executed at extra cost at mutual agreed rates from OPTCL	Bidders to note that in line with Clause 1.1 of Volume-II Technical Specification E6 - Civil Works, Any other items, not specifically mentioned here but required for the commissioning of switch yard/substation shall be deemed to be included in the scope of this Specification. No extra payment shall be made by OPTCL in this regard.As per Vol-II A -2(D) Scope of work the bidder to visit the site and assess the nature of foundation.
69			Civil works		New items for completion of civil works	We shall quote strictly as per the BOQ only. We don't envisage any new items in our scope of works. Any new items required by OPTCL shall be executed at extra works at mutual agreed rates.	Bidders to note that in line with Clause 1.1 of Volume-II Technical Specification E6 - Civil Works, Any other items, not specifically mentioned here but required for the commissioning of switch yard/substation shall be deemed to be included in the scope of this Specification. No extra payment shall be made by OPTCL in this regard. For non-civil works, it will be mutually decided.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
70					Construction of Contract	PI confirm Divisibility of Contract for Supply, Civil,& Erection - we propose for three separate PO - 1 no for supply , 1 no for Civil , 1 No for Erection for smooth Execution & Tax related issues. Please confirm your acceptance.	The contract to be awarded to bidder shall be as under: 1. First Contract for Supply 2. Second Contract for Erection 3. Third contract: AMC Contract. Bidders are requested to go through the specifications of the OPTCL.
71					Limitation of liability	The total liability of Contractor is not capped under the contract. The aggregate liability of Contractor under the Contract not to exceed 100% of the Contract Price. The following clause may be included :: 'Notwithstanding anything contained anywhere else in this Contract, the aggregate liability of Contractor, whether under this Contract shall not in any event exceed 100% of the Contract Price'. We request you to kindly confirm your acceptance of the clause and kindly amend the Tender document accordingly	As per the Tender condition. No limitation can be kept.
72					Exclusion of indirect & consequential losses	Express disclaimer of indirect and consequential losses is to be added. The following clause may be used: 'Neither party shall be liable for any indirect, special, incidental or consequential losses, including loss of production, loss of revenue, loss of profits or loss of business'. If the customer does not agree to incorporate this clause, an appropriate waiver would have to be sought from the Group.	As per the Tender condition.
73					Suspension by Contractor	Contractor should have the right of suspension in the event of non-payment by the Employer.	As per the Tender condition.
74					Termination by Contractor	Contractor should be entitled to terminate the contract if the Contractor is unable to carry out its obligation under the Contract for any reason attributable to the Employer, including but not limited to the Employer's failure to provide possession of or access to the Site or other areas or failure or delay to obtain any governmental permit necessary for execution and/ or completion of the facilities. Contractor should also be entitled to terminate the contract in the event the Employer fails to comply with its payment obligations under the contract.	As per the Tender condition.
75					Entire Agreement	A specific clause stating that the contract represents the entire agreement of the Parties and shall override all other oral or written communication or any other documentation between parties on the subject matter of the contract is to be added.	As per the Tender condition.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
76	SCC	5.2.A	16.0		<p>For the purpose of Price Adjustment on exworks price components of the equipment, the date of shipment for Goods shall mean scheduled date of shipment or actual date of shipment, whichever is earlier. Scheduled date of shipment will be exworks date of despatch, governed by the accepted PERT Network / Bar Chart, Similarly, for the purpose of Price Adjustment on Installation price component, the Billing period shall mean the billing period as per Contract time, schedule, i.e, the agreed Bar Chart or actual period, whichever is earlier. The period for various Installation activities will be as per agreed Installation Bat Chart indicating monthly schedule of I*installation activities for completion of works. However, when the Employer's specific approval for advancement of shipment/ installation activities has been obtained in such case the said advanced date shall be treated as the schedule date of shipment/ installation activities for the purpose of working out the price adjustment payable.</p> <p>No price increase shall be allowed beyond the original delivery / Installation dates unless specifically stated in the Time Extension Letter, if any, issued by the Employer. The Employer will, however, be entitled to any decrease in the Contract Price which maybe caused due to lower price adjustment amount in case of delivery of Goods/ Installation beyond the original delivery / Installation dates. Therefore, in case of delivery of Goods/ Installation beyond the original delivery/ Installation dates, the liability of the Employer shall be limited to the lower of the price adjustment amount which may work out either on schedule date or actual date of despatch of Goods/ Installation.</p>	<p>Since PERT network /Bar chart is condition precedent for Advance payment &amp; detailed PERT Network/Bar Chart at the initial stage will be difficult to envisage. Hence we propose for following for above clause:-</p> <p>For the purpose of Price Adjustment on ex works price components of the equipment, the date of shipment for Goods shall mean scheduled date of shipment or actual date of shipment, whichever is earlier. Scheduled date of shipment will be exworks date of despatch, governed by the accepted PERT Network(<b>including Revision if any</b>) / Bar Chart (<b>including Revision if any</b>), Similarly, for the purpose of Price Adjustment on Installation price component, the Billing period shall mean the billing period as per Contract time, schedule, i.e, the agreed Bar Chart (<b>including Revision if any</b>)or actual period, whichever is earlier. The period for various Installation activities will be as per agreed Installation Bat Chart indicating monthly schedule of I*installation activities for completion of works. However, when the Employer's specific approval for advancement of shipment/ installation activities has been obtained in such case the said advanced date shall be treated as the schedule date of shipment/ installation activities for the purpose of working out the price adjustment payable.</p>	<p>As per the Tender condition. Any revised bar chart shall not be considered for PV calculation.</p> <p>This agreed installation bar chart shall be in line with the bar chart furnished here with without much variation and without affecting the commissioning/ energisation target.</p>

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
77	SCC	6	26.0	Taxes & Duties		<p>1. PI Confirm BOCW will not be applicable on supply work</p> <p>2. We understand WCT &amp; Income tax TDS will not be applicable on supply portion &amp; WCT will not be applicable on Erection as per statutory Provisions. PI clarify.</p> <p>3. Since Service Tax is the liability of Service Provider , hence Service Tax as applicable if any shall be admitted upon the production of documentary evidences - Bidders Tax Invoice , regn certificate , will be considered as Documentary proof .</p> <p>4 We understand that Service Tax on Erection Contract shall be on 100% value of Erection Order , For Civil Work (If applicable) , As per Orissa VAT rule , Material : Labour Portion is considered as 85:15 ,Hence On Materials Portion VAT will be applicable @ 13.5% &amp; on Labour Portion Service Tax will be applicable @12.36% . Since our Prices will be inclusive hence liability to discharge under both laws shall be of Bidder. We will Confirm &amp; declare that Liabilities on account of VAT /Service TAX shall be of Bidders at the time of raising Invoices. PI confirm</p> <p>5. We propose Entry Tax applicable on Own &amp; Bought out items needs to be paid directly by by Purchaser since it will facilitate in smooth execution as Road Permit also needs to be provided by OPTCL only.</p> <p>6 Nothing mentioned about Road Permit for Own &amp; Bought out items. PI confirm , Purchaser will issue Road Permit for Own &amp; Third Party Supplies</p>	As per the Tender condition. @ Of 1% cess on BOCW. Price not to be quoted and will be paid as per actuals on documentary evidence.
78	SCC	6.0	27.0	Statutory Variation		<p>Please clarify statutory variations on account of - rates of Taxes increased or decreased, a new Tax is introduced, an existing Tax is abolished, or any change in interpretation or application of any Tax occurs during the course of the performance of the Contract, including the extended period of the contract for reasons not attributable to Bidder , Since the same is not mentioned in Bid Documents specifically.</p> <p>We also understand that after introduction of GST ,the existing laws on excise, VAT,Service tax etc will be abolished so all the goods &amp; Services to be sold by Bidder to Purchaser will be "Direct Transactions " only. POST GST , Purchaser/Owner will not be able to issue Statutory forms etc .</p> <p>We request you to kindly confirm the acceptance of statutory variation on account of any rates of Taxes 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 during the course of the performance of the Contract, including the extended period of the contract, which was or will be assessed on the Contractor in connection with performance of the Contract , the additional tax impact thereof on supplies ( Own &amp; Bought out Items ) &amp; services to be added in the contract price and to be paid to the Contractor by the Owner, extra at actuals, against documentary evidence i.e. contractor's invoice</p>	As per the Tender condition.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
79	SCC	8.0	28.0		Advance Payment: Ten percent (10%) of the Exworks price component shall be paid as an initial advance on presentation of the following:  e) Detailed PERT Network / Bar Chart and its approval by the Owner.	Since PERT network /Bar chart is condition precedent for Advance payment & detailed PERT Network/Bar Chart at the initial stage will be difficult to envisage, we propose for deviation on the above .	As per bar chart has been furnished . The bar chart is enclosed.
80	SCC	8.1.(v) & 8.3.(iii) Supply part & Erection Part	30.0		The balance ten percent (10%) of the Ex works price component shall be paid after successful commissioning of the complete Substation/ Line and handing over to ODISHA Power Transmission Corporation Ltd.  The balance 10% (ten percent) of the erection price component shall be paid within sixty (60) days after successful commissioning of the sub station and transmission line and issuance of Taking Over Certificate by the owner.	We propose to add following :-If commissioning is delayed beyond 30 days after pre-commissioning checks are completed due to the reasons not attributed by supplier, pre – commissioning check will be treated as deemed commissioning for all contractual purposes and final payment shall be released against bank guarantee valid till revised commissioning schedule along with suitable compensation to supplier	As per the Tender condition.
81	SCC	9.0	33.0		The quantity of all equipment/materials given in the Bid Proposal Sheets, Volume-IB of the bidding documents are provisional. The total variation in quantity shall be unlimited. The Contractor(s) shall be responsible for supply and execution of such final quantities of completion of the entire work under his scope and they shall be paid for such finalized quantities at the unit rate indicated in the Letter of Award / NOA after approval by the competent authority.	We propose for +/-20% variation in Quantity as per Industry Practice. Moreover Time Extension for Qty variation without LD & as well revision in Schedule work (L2) for such Variation shall be incorporated .The Unit rate shall be subject to Price adjustment as per IEEMA after completion of reasonable period as per Prevalent Industry practice.	As per the Tender condition. Increased Quantity order will mention the delivery period for additional quantity in consultation with the contractor. Any deviation from the mutually agreed schedule for additional quantity will invite penalty clause.
82	SCC	10.2	33.0		10.2The schedule shall be reckoned from the date of issue of Letter of Award/NOA, Within 15 (fifteen) days of issuance of Letter of Award/NOA, Contractor shall submit Bar Chart/PERT Network conforming to the delivery/erection dates mentioned in Letter of Award/ NOA for review and approval.. After approval of Bar Chart/PERT Network, one reproducible with sufficient number of prints as desired by Orissa Power Transmission Corporation Ltd., shall be submitted.	PI amend the above clause as under : The schedule shall be reckoned from the date of issue of Letter of Award/NOA, Within 15 (fifteen) days of issuance of Letter of Award/NOA, Contractor shall submit Bar Chart/ PERT Network conforming to the delivery/erection dates mentioned in Letter of Award/ NOA for review and approval.. After approval of Bar Chart/PERT Network, one reproducible with sufficient number of prints as desired by ODISHA Power Transmission Corporation Ltd., shall be submitted. <b>However Revisions of L2 Schedule shall also be done based on the progress of work schedule as envisaged at the time of Performance of the Contract after Mutual agreement by both Employer &amp; Contractor. In case of such revisions , Price Adjustment /Liquidated Damages to the Contract Price shall be based on such revised schedule only</b>	As per the Tender condition. Price adjustment shall be as per the original approved L2 schedule, but not as per the revised schedule. For penalty it will be decided form case to case basis and the attributable factor for such revision.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
83	SCC	15.0	36.0	15.2	Further all equipment and materials being supplied by Orissa Power Transmission Corporation Ltd. free of cost for the erection (as per Technical Specification) shall be kept insured by the Contractor against any loss, damage, theft, pilferage or fire from the point of unloading upto the time of taking over by owner, including handing, transportation, storage, erection, testing and commissioning etc. The premium paid to the Insurance company by the Contractor for such insurance shall be reimbursed by Orissa Power Transmission Corporation Ltd to the Contractor. The Contractor shall obtain competitive quotation for such insurance and shall take prior approval form Orissa Power Transmission Corporation Ltd before taking the insurance. The insurable value of the equipment being supplied by Orissa Power Transmission Corporation Ltd shall be intimated to the Contractor for arranging the insurance.	We can arrange insurance of free issue materials but with our Insurer only i.e Bajaj Allianz General Insurance co , we shall not arrange competitive quote from other three insurance co., please modify clause.	As per the Tender condition. The quotation from minimum three insurance companies
84	SCC	16.0	36.0	16.0	POWER, WATER & COMMUNICATION The Contractor shall make his own arrangements for power, water, telephone and other facilities necessary for the construction / erection of equipment and line at his own cost.	We request for Power & Water to be provided by OPTCL at free of cost upto certain reasonable limit	It is contractor's responsibility as per the tender condition. Ref CI No. 16, Vol-IA-SCC condition of contract.
85	SCC	20.0	37.0	20.1	The period of latent defect warranty in terms of clause 15.0, Section GCC, Volumel shall be limited to 10 years from the date of expiry of Guarantee Period.	We propose for Latent defect liability period for 3years as per Industry Practice	As per the Tender condition. Refer SCC, which supplement GCC.Ref Vol-IA-SCC- CI No. 20. Five years.
86	GCC	38.4	81.0		All costs on account of insurance liabilities covered under the Contract will be on Contractor's account and will be included in Contract price. However, the Employer may from time to time, during the pendency of the Contract, ask the Contractor in writing to limit the insurance coverage, risks and in such a case, the parties to the Contract will agree for a mutual settlement, for reduction in Contract price to the extent of reduced premium amount. The Contractor, while arranging the insurance shall ensure to obtain all discounts on premium which may be available for higher volume or for reason of financing arrangement of the project.	Reduction in contract value during policy period will not reduce premium, hence pass on refund of premium to Owner does not arise	As per the Tender condition.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
87	GCC	12.0	63.0	12.2	The Contractor shall submit a detailed PERT network/bar chart within the time frame agreed consisting of adequate number of activities covering various key phases of the work such as design, procurement, manufacturing, shipment and field erection activities within fifteen (15) days of the date of Notification of Award. This network shall also indicate the interface facilities to be provided by the Employer and the dates by which such facilities are needed. The Contractor shall discuss the network so submitted with the Employer and the agreed network shall form part of the Contract documents. As provided in the clause of Terms of Payment in this Section, finalisation of the network/bar charts will be precondition to release of any initial advance to the Contractor. During the performance of the Contract, if in the opinion of the Engineer, proper progress is not maintained, suitable changes shall be made in the Contractor's operations to ensure proper progress without any cost implication to the Employer. The interface facilities to be provided by the Employer in accordance with the agreed network shall also be review while reviewing the progress of the Contractor	PI amend the above clause as under :Contractor shall submit a detailed PERT network/bar chart within the time frame agreed consisting of adequate number of activities covering various key phases of the work such as design, procurement, manufacturing, shipment and field erection activities within fifteen (15) days of the date of Notification of Award. This network shall also indicate the interface facilities to be provided by the Employer and the dates by which such facilities are needed. The Contractor shall discuss the network so submitted with the Employer and the agreed network shall form part of the Contract documents. As provided in the clause of Terms of Payment in this Section, finalisation of the network/bar charts will be precondition to release of any initial advance to the Contractor. During the performance of the Contract, if in the opinion of the Engineer, proper progress is not maintained, suitable changes shall be made in the Contractor's operations to ensure proper progress without any cost implication to the Employer. The interface facilities to be provided by the Employer in accordance with the agreed network shall also be review while reviewing the progress of the Contractor. <b>Revisions of L2 Schedule shall also be done based on the progress of work schedule as envisaged at the time of Performance of the Contract after Mutual agreement by both Employer &amp; Contractor.In case of such revisions , Price Adjustment /Time extension/Liquidated Damages to the Contract Price shall be based on such revised scehdule only.</b>	As per the Tender condition. For PV not applicable. For Penalty as per the cause attributable for such revision.
88	GCC	13.0	63.0		The Contract shall be considered as having come into force from the date of the notification of award unless otherwise provided in the notification of award.	we request effective date of contract should be acceptance of LOA by Contractor on fulfillment of following conditions :- 1. Signing of Contract 2.Payment of Full Interest free advance. 3.Emcrumbrance free & unrestricted acces to site for performance of scope of work.	As per the Tender condition. i.e. from the date of issue NOA, NOA will be sent by e-mail & also by registered post.



SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
89	SCC	8.4	30.0		Terms of Payment :- The amount of interest to be recovered from a particular bill shall be calculated @ 10% per annum on the value of advance corresponding to the % age of total progressive payment being released. The period for which the interest is to be calculated shall be reckoned for the date of release of the advance payment to the actual date of release of the said progressive payment of the expiry of stipulated time frame for release of such progressive payments.	We request to amend the clause since Advance payment shall be for smooth execution & facilitating the Project initiation so for the assistance of project execution the Owner shall give advance without interest.	Ten percent (10%) of the Ex-works price component shall be paid as an initial advance (a) An unconditional & irrevocable advance payment Bank Guarantee in favour of Orissa Power Transmission Corporation Ltd., for the equivalent amount of advance . The said Bank Guarantee shall be initially valid upto the end of ninety (90) days after the scheduled date for successful completion of commissioning and shall be extended from time to time until ninety (90) days beyond the actual date of successful completion of commissioning, as may be required under the contract. <b><i>(b) On progressive payment to the EPC contractor ,the advance taken shall be recovered proportionately from the bill and after such adjustment,the contractor shall furnish the reduced amount BG against the outstanding advance payment.</i></b>
90	SCC	8.1	28.0		An unconditional & irrevocable advance payment Bank Guarantee in favour of Orissa Power Transmission Corporation Ltd., for the equivalent amount of advance in accordance with the provisions of Clause 34.7.1 (i) (b), Section –GCC, Volume– I and as per Performa attached with Section Annex Of Volume (Conditions of Contract). The said Bank Guarantee shall be initially valid upto the end of ninety (90) days after the scheduled date for successful completion of commissioning and shall be extended from time to time until ninety (90) days beyond the actual date of successful completion of commissioning, as may be required under the contract.	We request Advance Bank Guarantee for supply items shall be returned after completion of supplies/Advance adjustment .It should not be linked to successful completion of commissioning since as per Clause 8 of SCC, Performance Guarantee of 10% is already required to be submitted valid upto ninety (90) days after expiry of the Warranty Period , so additional 10% Advance Bank guarantee till successful completion of commissioning inspite of Completion of supplies is not as per prevalent Industry practice Provision for reduction in Advance BG amount should be there on quarterly basis since Advance Amount shall be adjusted against Running Bills. Pl amend & Confirm	To be progressively neutral as per the Bol decision
91	SCC	12.0	35		12.OPENALTY FOR DELAY IN COMPLETION. If the Contractor fails to perform the work within the specified period given in the contract or any extension granted thereof, with respect to successful completion of testing & commissioning of substation & transmission line, the Contractor shall pay to Orissa Power Transmission Corporation Ltd. as penalty, a sum of half percent (0.5%) of the Contract price for each calendar week of delay or part. However, the amount of penalty for the Contract shall be limited to a maximum of five percent (5%) of the total Contract price except for spares.	1. We request for replacement of " Penalty " with Liquidated Damages as per Prevalent Industry Practice 2) We request Purchaser to accept 0.5% of the contact price of undelivered equipment per week subject to maximum of 5% of the contract price so delayed. 3) Ceiling for Delay in Commissioning (incl delay in supplies ) shall be 5% of Contract price.	As per the Tender condition.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
92					General Commercial Clarification-Change in Law	In case of Change in Law , regulation, ordinance, order or by-law having the force of law is enacted, promulgated, abrogated or changed (which shall be deemed to include any change in interpretation or application by the competent authorities) or Introduction of GST ,(the existing Excise ,VAT/CST ,service Tax which will be replaced by GST ), any additional impact on account of such changes as mentioned , during the course of the performance of the Contract, including the extended period of the contract , which will affect the Costs & Expenses of the Supplier shall be added in the contract price and to be paid to the Supplier by the Purchaser , However , in case changes in Laws & Regulations during the course of the performance of the Contract, including the extended period of the contract result in reduction in Costs & Expenses of the Contractor ,contract price shall be reduced by such amount as arrived after giving effect of such Change in	Mutually agreed between OPTCL and Contractor
93	SCC	32	43	32.1	Unless otherwise specified in the Bidding Document, it shall be the CONTRACTOR'S sole responsibility to obtain all approvals from any authority (except for environment clearance) required under any statute, rule or regulation of the Central or Orissa State Government for the performance of the contract and / or the contractual work	We request for following amendment in clause 32.1 :- The Supplier /Contractor shall be responsible for smooth progress of work as per Contract Technical Specification agreed between the Purchaser & Supplier/Contractor .Supplier shall not be responsible for Statutory Clearance from Local civic, village panchayat and government authorities,or any issue related to villagers / local public affecting the execution of the works .Any such incidence which will delay the Progress of Work shall subject to Time Extension without LD, Incremental cost ,Price Variance etc	As per the Tender condition.
94					General Commercial Clarification- Completion Time	1. Completion shall be calculated from the date of LOA acceptance provided advance is received by customer within 30days of IOA acceptance date against submission of equivalent BG . Further in the event Commissioning or Performance Guarantee tests could not be carried out due to the reasons attributable to the contractor ,the commissioning shall be deemed to be carried out by the contractor within one month of the date of mechanical completion & PG tests shall be deemed to have been carried out within three months of mechanical completion .	As per the Tender condition.
95					General Points	As we have to get the comments/clarification from various Manufacturers and Manufacturing units and they require more time for sending the clarifications Hence we request you to extend the date of receipt of Technical and commercial pre bid queries upto 29th August 2012.	Price bid conference already done
96					General Points	The Bid submission date mentioned in the NIT is 17.09.2012. As we have to submit more queries as mentioned in Point No. 22. The time available for preparation of tender is very little. Further as the 220KV GIS is imported Item, we require more time for submission of our bids. Hence we request you to extend the Last Date & Time of Receipt of Bid (Part-I & Part-II) upto 31 <sup>st</sup> OCTOBER 2012. Kindly grant us the time.	Bid submission and opening date has been extended. Dt of Recpt: 16.10.12 at 11 Hrs. & Dt of Opening 16.10.12 at 11:30 Hrs.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
97					Right of way for the Transmission Line	Our scope excludes Right of way for the Transmission line. Our scope excludes Land compensation, crop compensation, PTCC clearance, Permission/Compensation from Corporation or Municipality etc for the Transmission line.	The scope shall be as per OPTCL Tender specifications.
98			attachment clause III	12	Equipment Qualification ( SF6 Gas Insulated Switchgear)	we request you to amend the clause to 8 bays/one stations/1 year in India. We request you to amend the clause for international manufacturer's as per clause I. Please amend the tender documents.	It is clarified that performance of the GIS equipments will be considered from the same manufacturing unit from where the GIS equipments are offered. <b>QR revised as below:-</b> <b>Equipment qualifications:</b> SF6 Gas Insulated Switchgear (III) The 220 KV or above voltage class SF6 Gas Insulated switchgear from GIS supplier/manufacturer must have been supplied to at least <b>ONE (01) no.</b> of GIS sub stations ( <b>with Min 4 bays in substation</b> ) in <b>India</b> and must have been operating satisfactory of the said GIS substations for a minimum period of <b>ONE (01) year</b> , as on the date of bid opening.
99			Clause IV	12	Type test	As the specification is not clear , we request you to kindly clarify that type tests are required from the same manufacturing unit or from parent company if it is acceptable. We would like to amend the specification such that test should be from the same manufacturing unit. Please amend the specification.	It is clarified that the type tests should have been conducted on the GIS equipment manufactured at the same facility from where the bidder is proposing to manufacture & supply the tendered GIS meeting the OPTCL tender specification requirements.
100			Clause V	13	Operation and maintenance for 3 years	As GIS is a standard product we request you to remove the scope of operation and maintenance from the scope of works.	The scope shall be in line with the OPTCL Tender specifications.
101			Clause V	13	Operation and maintenance for 3 years	In the event if OPTCL insists for operation and maintenance for 3 years, please provide a separate contract for the operation and Maintenance. Further in the event of successful bidder, we request you to provide 2 separate contracts as below:- 1) One contractor for construction of substation as listed below- a) supply contact for supply of equipments and materials b) Service contact for Erection, testing and commissioning c) Civil works 2) Second separate contract for operation and maintenance for 3 years of 220/33KV GIS substation.	As per the Tender condition. Separate contract as below: 1. Supply contract 2. Erection Contract 3. AMC Contract.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
102			Cl. No. 5.0 (A)		General	Equipment Qualifications (SF6 Gas Insulated Switchgear): With reference to Cl. No. 5.0 (A), 220/33kV Substation work, we would like to request you to include the following clause after Clause (V) of Technical criteria:- "(VI) The Bidders of International repute, who are interested to supply GIS from their Indian manufacturing unit, shall also be considered provided that their Parent firm or Group Company meets the criteria specified in (I) to (IV)." With the above change in equipment qualification, you will not only benefit with the same quality product supplied from our Indian factory but also effective coordination during execution and prompt after sales service support.	It is clarified that performance of the GIS equipments will be considered from the same manufacturing unit from where the GIS equipments are offered. <b>QR revised as below:-</b> <b>Equipment qualifications:</b> SF6 Gas Insulated Switchgear <b>(III)</b> The 220 KV or above voltage class SF6 Gas Insulated switchgear from GIS supplier/manufacturer must have been supplied to at least <b>ONE (01) no.</b> of GIS sub stations <b>(with Min 4 bays in substation) in India</b> and must have been operating satisfactory of the said GIS substations for a minimum period of <b>ONE (01) year.</b> , as on the date of bid opening.
103					GIS Design	With reference to TS-GIS system-E30, page 4 of 65 (last para), wherein it is mentioned that "The switchgear modules are single-phase or three phase encapsulated", however, in page 8 of 65, it is written "Single-phase", we assume that GIS designs of both single phase & three phase are acceptable. It is also to be noted that three phase design of GIS are acceptable in most of the utilities like PGCIL, MSETCL, Reliance Energy, Tata Power etc.	Enclosures shall be of single-phase/three-phase encapsulation having type tested.
<b>L &amp; T's PRE BID OBSERVATION</b>							
104	Vol-IIA, Scope of Works. Page 5/34 & Vol II PLCC(TS) E18-PLCC				Cl.2.viii) of Vol-IIA, Scope of Works. Page 5/34 & Vol II PLCC(TS) E18-PLCC	As per the Cl.2.viii) of Vol-IIA, Scope of Works, it is mentioned that only installation of PLCC equipments shall be in contractor's scope. We understand that there is no BOQ for PLCC in price schedule. Hence same is not in our scope of work. Please confirm. We also understand that FOTE is required for the system not PLCC. Please confirm that our understanding is correct.	FOTE equipment are to be installed in this sub-station and also at the remote end sub-stations. There is no PLCC system in this package.
105	33kV SF6 GIS No. TS-GIS system-E30.				33kV SF6 GIS No. TS-GIS system-E30.	Kindly provide the single line diagram for 33kV GIS which is not available in the tender document.	The Single line Diagram for 33KV GIS system is enclosed.
106	Vol-IIA, Scope of Works. Page 4/34 & sl. No 2.5 Bid Price Schedule 2A-SS page 4 of 90				Cl.2.vii).a).(2) of Vol-IIA, Scope of Works. Page 4/34 & sl. No 2.5 Bid Price Schedule 2A-SS page 4 of 90	As per scope of works page 4 of 34, 10 bays to be considered for 33kV GIS, where as Bid Price Schedule 2A-SS page 4 of 90 it is appeared 11 bays. Please clarify the exact scope of work.	The no. of bays for 33KV GIS shall be considered as 10 in line with above clarification Sr. No. 38.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY	
107					Bid Price Schedule 2A-SS page 4, 10 of 90	Sl. No 2.5, 21.1 of Bid Price Schedule 2A-SS page 4, 10 of 90	As per sl. No 2.5 of Bid Price Schedule 2A-SS page 4 of 90, one number 33kV GIS bay module to be considered for station auxiliary supply. However as per BPS cl.21.1 page no 10 of 90, two nos station transformers to be considered for the purpose of auxiliary power supply(for 2 Main switch boards). Kindly clarify the incoming supply for the above station transformers, either 33kV GIS modules or separate Double Pole structure and SEB supply.	In the BPS, the Feeders quantity shall be considered as under: 1. Item no. 2.1 – 33 KV Transformer feeders - 2 Nos. 2. Item no. 2.2 - 33 KV Feeders - 7 Nos. 3. Item no. 2.4 - 33 KV Bus Coupler - 1 No. 4. Item No. 2.5 - 33 KV Station Transformer feeder stands deleted.Total No. of Circuit Breakers Bays - 10 Nos. (one of the feeder bay can be utilised for station transformers (2X315
108					Bid Price schedule & 220/33kV SF6 GIS No. TS-GIS system-E30. Page 6 of 65	Bid Price schedule & 220/33kV SF6 GIS No. TS-GIS system-E30. Page 6 of 65	As per 33kV GIS specification, Short circuit withstand level is mentioned as 31.5kA for 3 secs, but as per BPS it is 25kA for 3 secs. Kindly clarify the same.	The Short Circuit current rating shall be considered as 25kA for 3 sec in line with the BPS.
109					Vol II (TS) E24 - Substation Lighting & Vol-IIA, Scope of Works. Page 8/34	Vol II (TS) E24 - Substation Lighting & Cl.2.1 of Vol-IIA, Scope of Works. Page 8/34	Indoor lighting panel details are not available in the specification. Kindly furnish us the following details: i). Technical specification/details for indoor lighting panels ii). Lux level to be maintained for GIS hall iii). Uniformity ratio to be maintained.	Please refer Vol-II-TS-E-19 & E-24 for distribution board. Panels and cables/wires are to meet the load requirement. Which will be decided during detail engineering on the tender column to be provided
110					Vol-IIA, Scope of Works. Page 8/32	Cl.XXVIII - 2.1.1 Vol-IIA, Scope of Works. Page 8/32	As per the Cl.XXVIII of 2.1.1 of scope of works, it is understood that no lighting cum lightning mast shall be considered. Kindly provide the details for considering the lightning protection nearby transformer area.	Spikes of 09 mtrs length, 40 mm dia, medium gauge G.I pipes to be fitted on the tower column for direct lightning strike.
111					Vol -II TS E21- Control, relay & protn, SAS, AC kiosk	Cl.26 of Vol -II TS E21- Control, relay & protn, SAS, AC kiosk	Kindly clarify whether future / spare bay to be considered for Bus bar protection. If yes, kindly provide the no of future bays.	It is clarified that future bays are not to be considered for Bus Bar Protection purpose in the present scope of works. But in case future extension the system should integrate with the existing.
112					Bid Price Schedule 2A-SS page 6, of 90	Sl. No 13 of Bid Price Schedule 2A-SS page 6, of 90	As per the clause mentioned, cable trench sections were given as sec 1-1, 2-2, 3-3, 4-4.Please furnish the details/sizes for the same.	Refer Vol-II-TS-Civil Works-E-6. Clause 12.8 (Page-28 of 84)
113					220/33kV SF6 GIS No. TS-GIS system-E30.	220/33kV SF6 GIS No. TS-GIS system-E30.	Kindly confirm whether gas density monitor is required phase wise / not.	Gas density monitoring units are to be provided at the convenient locations.
114					General	General	Kindly provide us the following: i). Overall Plot plan along with coordinates ii). Control Building Layout - Plan & Sections iii). 220kV GIS line incomer bay connection details(ie., it is through bus duct or cable)	(I) The typical layout of the GIS substation is enclosed.Proposed to have two nos building. (1) 220 KV GIS Building shall be of size 25.5 mtrsX 11 mtrs & height approx 10 mtrs, sizes shall be Column centre to centre (However the bidder to design the same considering the safety of the building and 220 KV GIS system). (2) 33 KV GIS Cum Control room building (GF:14.5 mtrsX25mtrs & same area in FF, & height of each floor shall be appro 5 mtrs ,sizes shall be Column centre to centre. Accordingly revised BPS for the same is enclosed. (II) The incomer feeder bays shall be with Gas Insulated Bus

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
115	General				General	Kindly clarify the following: i). Scope of cable termination on HT side of Station transformer ii). Scope of HT cable & the length of the cable to be considered.	33 KV Cable specification is enclosed. 33 KV XLPE armoured single core, 800 Sq mm copper Cable to be used. (1) From 33 KV side of the Power Transformer to the 33 KV GIS cubicle. (2) 33 KV XLPE armoured three core, 95 Sq mm copper Cable to be used. From 33 KV GIS cubicle to 33 KV side of the Station Transformer. Accordingly the bidder to ascertain the quantity.
116	General - Cable termination				General - Cable termination	Kindly furnish the EHV 220kV & 33kV cable termination details / specification.	Bidders to propose as per requirement and as per their proposal for GIS sub-station. There will be two nos of 220/33 KV, 40 MVA Transformers and 2 Nos of 33/0.43 KV ,315 KVA Station Transformers. The requirement of cable termination for 33 KV side of the transformers are to be considered.
117	General - Diesel generator				General - Diesel generator	Kindly clarify the scope of emergency AC supply / DG set. Kindly furnish the details / technical specification.	Not Applicable. No DG set is considered in this package.
118	Bid Price Schedule 2A-SS page 5, of 90				SI No:10 in Part-I, Schedule-2A	With reference to the SI No:10 in Part-I , schedule-2A, we understand that the connecting transformer with GIS through EHV cable. Please confirm.	The connection of the Transformer with 220KV GIS system will be Gas Insulated Bus duct with termination of SF6 Gas to Air Bushings.
119	Bid Price Schedule 2A-SS page 5, of 90				SI No:11 in Part-I, Schedule-2A	We are also proposing Polymer Insulator which will fulfil the system requirement. This is also accepted by most of state utilities as well as PGCIL. Hence we request you to kindly accept our request.	Porcelain insulators to be used.
120	Bid Price Schedule 2A-SS page 6, of 90				SI No:12.1 in Part-I, Schedule-2A	With refereed clause, the mentioned earth spacing maximum is 5Mtr on both ways. We understand that the given space size is indicative only. Bidder shall design the Earth mat spacing based on actual soil resistivity. Please confirm our understanding is correct.	As per Tender Specification. Please refer to Vol-II-TS-E-5, Cl. 6 & BPS. The spacing will be as per design but subject to a maximum spacing of 5 mtrs.
121	Bid Price Schedule 2A-SS page 6, of 90				SI No:13 in Part-I, Schedule-2A	We are proposing Prefabricated MS angle with red epoxy paint instead of GI angle. This is standard industrial practice & will fulfil all the requirement.	As per Tender Specification. Should be of Hot Dip Galvanised.
122	Bid Price Schedule 2A-SS page 7, of 90				SI No:18.3 in Part-I, Schedule-2A	We presume that the given quantity in refereed sl no is also included the foundation bolts. Please confirm.	Yes,inclusive of foundation bolt.
123	Bid Price Schedule 2A-SS page 8, of 90				SI No:20 in Part-I, Schedule-2A	We understand that the given BOQ for FOTE in refereed clause is for Infocity-II substation end only not for other end. Please confirm.	For other ends also.
124	Bid Price Schedule 2A-SS page 12, of 90				SI No:22.3 in Part-I, Schedule-2A	With refereed clause, we hope OPTCL shall also allow us to design the combination of LED with Halogen light fitting to achieve the desired LUX level. Please confirm.	As per Tender Specification. Please refer to Vol-II-TS-E-24 & BPS

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
125	Bid Price Schedule 2A-SS	page 16, of 90			SI No:24.2.1 in Part-I, Schedule-2A	As per scope of works page 4 of 34, 10 bays to be considered for 33kV GIS where as per SI No:24.2.1 in Part-I, Schedule-2A page 16 of 90 it is appeared 9 bays for Substation Automation. Please clarify the exact scope of work.	In the BPS, the Feeders quantity shall be considered as under: 1. Item no. 2.1 – 33 KV Transformer feeders - 2 Nos. 2. Item no. 2.2 - 33 KV Feeders - 7 Nos. 3. Item no. 2.4 - 33 KV Bus Coupler - 1 No. 4. Item No. 2.5 - 33 KV Station Transformer feeder stands deleted. Total No. of Circuit Breakers Bays - 10 Nos. (one of the feeder bay can be utilised for station transformers (2X315 KVA,33/.43).
126	Bid Price Schedule 2A-SS	page 16, of 90			SI No:24.2.1 in Part-I, Schedule-2A	Whether Substation Automation is to be provided for future bays? If yes please confirm no of bays.	It is clarified that future bays are not to be considered for substation automation purpose in the present scope of works. Provision for integration with the future expansion.
127	Bid Price Schedule 2A-SS	page 16, of 90			SI No:24.2.1 in Part-I, Schedule-2A	We propose to provide protection for 33kV GIS bays along with 33kV GIS panels. Hence we do not envisage any separate control & protection panel. This will meet all system requirement & this is also standard industrial practice which is followed by all other Power utilities.	For 33KV control & protection system to be provided in one panel (BCU).
128	Bid Price Schedule 2A-SS	page 6, of 90			SI No:13 in Part-I, Schedule-2A	We are proposing High density PVC pipe instead of GI Pipe. Please confirm our proposal.	High density PVC pipe of ISI mark of reputed manufacturer having adequate thickness and sizes can be considered. Can be used after approval of OPTCL.
129	Bid Price Schedule 2A-SS	page 10, of 90			SI No:21 in Part-I, Schedule-2A	With refereed clause required lighting transformer also, hence we request you to kindly furnish the rating of the same.	Not required.
130	Bid Price Schedule 2A-SS	page 14, of 90			SI No:23 in Part-I, Schedule-2A	As per refereed clause fire protection system is to be considered for power Transformer but item of fire protection system for power transformer is not appearing in refereed clause. We understand that N2 based fire protection system will meet the requirement however same will be provided by OPTCL as part of transformer package. Please confirm our understanding is correct.	As per Tender Specification. Ref the Vol-IB-BPS & Scope of work-Vol-IIA
131	General					We found that there is a separate specification for GIS in section E30 as well as separate specification for individual switchgear equipment in section E11, E12, E13 & E16. We understand that we need to follow Section E30 only for GIS. Please confirm.	It is clarified that for 220KV GIS equipment as well as 33KV Cubicle GIS equipment, Vol-II-TS-the Section E30 is to be followed.E11,12, E13are not applicable.
132	Layout				Tender Drawing	We presume that the typical layout shown is indicative only & bidder can design the layout as per the actual requirement. Kindly confirm.	Yes.
133	Layout				Tender Drawing	We understand that bidder can also propose SF6 bus duct in place of EHV Cable for 220kV level . Please confirm.	In 220 KV Side SF6 Bus duct to be considered. There shall be no 220 KV cable in 220 KV side.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
134	Earthing				Tender Drawing	1. Soil resistivity of 25 Ohm meter has been considered for main mat sizing 2. Main earth mat is provided only for the actual yard area requirement. Kindly confirm.	Bidder to assess the soil resistivity. However, the size of the earth mat to be 75mmX10mm with a maximum spacing of 5mtrs (refer the Vol-IB-Bidding Proposal Sheet-2A-SS).
135	Lighting System				Tender Drawing	1). Street lighting is provided only for the actual layout area requirement. 2). Conventional metal halide light fittings has been considered for GIS hall lighting, since the conventional high bay / medium bay fittings which we normally use for GIS hall doesn't have equivalent LED fittings in the market (as discussed with vendors). Kindly accept the conventional fittings.	1) As per the indicative layout given along with the tender document. 2) As per tender specification. Conventional fittings will be considered if LED fittings are not available at the time of installation.
136	Connection details				SI No:10.1 in Price Schedule - 2A-SS	220kV EHV XLPE power cables has been considered for connections between 220kV Incoming line to 220kV GIS, 220kV GIS to 220/33kV transformer. Kindly confirm.	220 KV cables are not required. Revised BPS schedules are enclosed.
137	Connection details				SI No:10.2 in Price Schedule - 2A-SS	33kV EHV XLPE power cables has been considered for connections between 220/33kV transformer to 33kV GIS. Kindly confirm.	Yes and also from 33 KV GIS to Station transformers.
138	Vol - II (Technical Specification)				CI No:6 in Section - E5 Design Clauses for Substation (Page No: 9/9)	We are proposing 32mm dia GI pipe instead of 50mm dia GI Pipe. This will fulfill the system requirement. Hence kindly accept our proposal.	As specified in the tender specification. Ref Vol-II-TS-E-5, 50 mm G.I. Pipe medium gauge to be provided.
139	Vol - II (Technical Specification)				SI No: 12 in System Data - Section E3 and CI No:1 General Specification - Note in Section -30 GIS System (Page No: 6 of 65)	As per the system data short circuit current rating is 40kA for 1 sec for 220kV level. whereas in GIS system it is 40kA for 3sec. Please clarify.	For GIS equipment, it is 40 KA for 3 Sec.
140	Volume -II Technical Specification				CI No:6 in Section - E5 Design Clauses for Substation (Page No: 9/9) and Tender drawing-Earthing of CVT	With reference to the design clause it is mentioned that Earthing electrode is GI pipe where as in reference earthing drawing of CVT it is mentioned that earthing electrode is ROD instead of pipe. Please clarify.	The earthing electrode is G.I pipe of 50mm Medium Gauge having length of 3.1 mtrs.
141	Price Schedule				Transformer Protection relay panels, BPS Sl.no 24.1.4 & 24.2.3	We understand that the Transformer protection relay panel mentioned against the clause No.24.1.4 is for both HV & LV side. But in cl.24.2.3, LV side protection of 40MVA power transformer is mentioned separately. Kindly clarify.	The 220 KV side of the transformer should have separate relay panel considering the differential protection, REF protection and 33 KV side of the transformer should have also separate relay cum BCU panel.
142	Vol-II Technical Specification				Cl.24.2.5 of BPS - 315kVA Station transformer protection	As per the clause mentioned 1 no of station transformer protection panel shall be provided for 2X 33/0.430 KV, 315 KVA transformer. Kindly confirm.	Yes, one protection panel to be used for two nos station transformer (2X33/0.43 KV, 315 KVA).
143	Vol-II Technical Specification				Vol-II 33kV GIS System E30 - Cl:8.1.3 Page: 41 of 65	Kindly note that Vacuum monitoring devices are not available in industry market (as discussed with vendors). However isolation of interrupter unit is possible through repair windows. Kindly accept/confirm.	Bidder are requested to propose the alternative arrangements possible to monitor vacuum levels.



SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
144	Vol-II Technical Specification				Vol-II 33kV GIS System E30 - Cl:8.2.5-8 Page: 45 of 65	Disconnecter & Earthing switch is operated by motor operation & not be stored energy type. Completed operations are always ensure by means of reed contact & limit switches. This logic ensure no operation is possible if the disconnecter or earthing switch is not fully engaged & also prohibit all further operations until complete contacts are made. Kindly confirm.	Yes, the disconnecter & Earthing switch shall not be of stored energy type, but shall be motor operated.
145	Vol-II Technical Specification				Vol-II 33kV GIS System E30 - Cl:12-2 Page: 54 of 65	The interconnection of bus bars between bays is through plug-in design. Complete shut-down of the bus bars are necessary while coupling or decoupling of individual bay module. This does not involve gas work at site & hence take minimum downtime. Kindly confirm.	As per requirement, future extension should be possible with the outage of only one bus section.
146	Vol-II Technical Specification				Vol-II 33kV GIS System E30 - Cl:5.2 Pg:40 of 65 & Cl:8.5.1-5 Pg:48 of 65 & Cl:21 Pg:57of 65	The rating of 33kV GIS bus bar 2000A & feeder bay of 1250A are at 40 deg C, however the same rating will be de rated at 50 deg C. Kindly accept / confirm.	The rating of 33kV GIS busbar 2000A & feeder bay of 1250A are at 50 deg C. The short circuit current should be 25 KA for 3 seconds.
147	Vol-II Technical Specification				Vol-II Current Transformer - Page: 33 & 34 & Vol-II 33kV GIS System E30 Cl:8.3 Pg:45 of 65	Offered CT's shall be Outer cone bushing type tape wounded LT CT. As technically it is not feasible to provide a ratio of 400- 200-100/1A, we shall provide 400-200/1A. Similarly 800-400/1A shall be provided instead of 800-400-200/1A. Accuracy & Burden & Knee Point voltage details etc shall be calculated based on actual requirement during detail engineering as indicated in Vol-II GIS system E30 & also in Cl:21 page: 57 of 65. Please confirm.	CTs construction shall be subject to OPTCL approval during detailed design stage. CT Ratio details shall be referred to 33kV SLD. There shall be three CT ratios as per specification. However the CT details shall be finalized during design stage. Three ratios can be achieved by providing secondary tappings.
148	Vol-II Technical Specification				Scope of works	The Bill of Quantity (BOQ) mentioned in BPS does not match with scope of work for the Spare Feeders. In BOQ 1no spare feeder is asked for 33kV GIS whereas 2nos spare feeder is called for in Scope of works. Kindly clarify.	02 Nos spare bay in 33 KV system extendible at both side of the gas insulated system.
149	Vol-II Technical Specification				33kV GIS System E30 - Cl:8.1.1 -3 Page: 41 of 65	Interrupter assemblies are of fixed type. In case of fault the same can be rectified/replaced through repair windows provided for each cubicle. Kindly confirm.	Yes,Repair windows to be provided.
150	Price Schedule				SI No:38 in price schedule - 2C-SS-A	Please confirm the distance between nearest OPTCL store and Infocity-II project site for estimation of transportation cost.	Nearest store is Mendhasal S/S. The distance shall be 10 Kms.
151	Price Schedule				SI No:38 in price schedule - 2C-SS-A	Please confirm the value of transformer to arrange the insurance for transformer erection works however supervision for the same shall be arranged by OPTCL.	Value of both the power transformers is Rs. 6.6 crores
152	General					Kindly furnish/clarify the following: i) Protection features envisaged in each module of 33kV GIS ii) Communication Protocol details with type of port. iii) Details of Incoming & Outgoing cable data sheet/details (No. of runs, core & size)	Detail can be finalised during detail engineering. Protection for 33 KV side of the feeder & Bus Coupler are (a) O/C & E/F (b) LBB (c) Under Frequency, for Transformer (a) O/C & E/F (b) LBB (c) Under Frequency(d) REF & differential. Differential protection & REF(for both windings) to be considered in 220 KV side of the relay panel.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
153	General					Please furnish the FGL and contour map (If available) showing existing ground levels for the proposed new substation.	Bidder to visit site & ascertain the same.
154	General					Please furnish the soil investigation report if available)	Bidder to visit site & ascertain the same.
155	Bid Price Schedule 2C-SS - B -Civil Works			SI No:1		With refereed SI No:1 Pile work is also included. However there is no line item appeared in given price schedule. We request you to kindly introduce pile work also as a line item.	Bidders to note that in line with Clause 1.1 of Volume-II Technical Specification E6 - Civil Works, Any other items, not specifically mentioned here but required for the commissioning of switch yard/substation shall be deemed to be included in the scope of this Specification. No extra payment shall be made by OPTCL in this regard. As per Vol-II A -2(D) Scope of work the bidder to visit the site and assess
156	Bid Price Schedule 2C-SS - B -Civil Works			SI No:4		We understand that the quantity given in SI no: 1.3 for Excavation , SI No:1.4 for PCC and SI No:1.5 for RCC are for all civil works for this package. Please confirm our understanding is correct.	As per the description in Vol-IB-Bidding proposal sheet. For tower column & equipment foundation work only.
157	Bid Price Schedule 2C-SS - B -Civil Works			SI No:5		We presumed that the required RCC for Drain works is already included in SI No:1.5 of price schedule (SI No:54/90). Please confirm.	Not included in 1.5. Drainage system to refer Item SI No. 5 of BPS 2C-SS.
158	Bid Price Schedule 2C-SS - B -Civil Works			SI No:26 & 26.2		We understand that the given Building Size is indicative only however bidder shall design building size based on their proposed GIS equipment size. Please confirm our understanding is correct .	Proposed to have two nos building. (1) 220 KV GIS Building shall be of size 25.5 mtrsX 11 mtrs & height approx 10 mtrs, sizes shall be Column centre to centre (However the bidder to design the same considering the safety of the building and 220 KV GIS system). (2) 33 KV GIS Cum Control room building (GF:14.5 mtrsX25mtrs & same area in FF, & height of each floor shall be appro 5 mtrs ,sizes shall be Column centre to centre. Accordingly revised BPS for the same is
159	Volume – IIA, Scope of works			Part 1, Schedule – 2C, SI NO 14 Page 62 of 90		Please provide the overall layout of the substation indicating the fencing boundary. Since it is a lot item, we need to know your exact requirement and estimate accordingly. Kindly furnish the same.	The area of the land is approximately 10 Acre. The map of the land is enclosed
160	Volume – II,Part-I Technical specification			Volume II (TS), E6-Civil works, Clause 13.0, Page 31 to 84		As per clause:13 Grade of reinforcement steel is mentioned as (Fe415), However We propose to use Fe 500 steel. As Fe 415 steel is not available in market. Please confirm the same.	Yes, the Grade of reinforcement steel Fe 500.
161	Volume – IIA, Scope of works			Part 1, Schedule – 2C, SI NO – 11, Page 61 of 90		Please clarify whether the switch yard is to be at one level or in multi levels. If in multi levels, please furnish the level details.	Can be decided during detailed Engg. The bidders can visit the site and ascertain.
162	Volume II (TS),			E6-Civil Works-Clause 16.11, Plastering, Page 53 to 84 & E6-Civil Works-Clause 2,Page 66 to 84		Ceiling plaster is CM 1:4 as per clause no:16.11 .but in the clause no:2 the same is given as CM 1:3. Please clarify which ratio is to be followed.	Ceiling plaster 1:4 for quarters and 1:3 for 33 KV GIS Cum Control room building.
163	Volume II (TS),			E6-Civil Works-Clause 16.12, Plastering, Page 53 to 84 & E6-Civil Works-Clause 3,Page 66 to 84		External plaster is 18mm thick with two layers as per clause no:16.12. But in the clause no:3 the same is given as 15mm thick. Please clarify which thickness is to be followed.	External plaster is 18mm(12mm+6mm) thick with two layers for GIS Cum Control room building & 15mm thick for quarters.
164	Volume II (TS),			E6-Civil Works-Clause 16.12, Painting Page 53 to 84 & E6-Civil Works-Clause 3,Page 66 to 84		Please clarify whether internal painting shall be as follows: 1. Internal & Ceiling Painting -White based plastic emulsion (or) 2.Internal & Ceiling Painting-Oil Bound Washable Distemper	The internal wall & ceiling painting shall be white based plastic emulsion.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
165	Volume – IIA, Scope of works				Part 1, Schedule – 2C, SI NO 8 Page 60 of 90	As per SI.No:8 Mix ratio of PCC is given as 1:4:8 (M10).the mix ratio for M10 is 1:3:6 and for M7.5 it is 1:4:8. Please confirm whether it is 1:4:8 or 1:3:6.	It will be 1:3:6 (M 10) instead of 1:4:8.
166	Volume II (TS) & Volume – IIA, Scope of works				E6-Civil Works-Clause 23.1, Page 62 to 84 & Part 1, Schedule – 2C, SI NO – 24, Page 67 of 90	As per specification store shed size is given as 15x15m. But as per price schedule same is given as 10x10m . Please clarify which size is to be followed.	10m X 10m as specified in BPS.
167	Volume II (TS) & Volume – IIA, Scope of works				E6-Civil Works-Clause 23.2, Page 62 to 84 & Part 1, Schedule – 2C, SI NO – 24, Page 67 of 90	As per specification platform size is given as 20x15m. But as per price schedule same is given as 15x10m . Please clarify the size which size is to be followed.	15m X 10m as specified in BPS.
168	Volume II (TS) & Volume – IIA, Scope of works				E6-Civil Works-Clause 1.5, Page 57 to 84 & Part 1, Schedule – 2C, SI NO – 17, Page 64 of 90	As per specification "D" Type & "E" Type Quarter area is given as 100 Sq.m & 61 Sq.m. But as per price schedule same is given as 120 Sq.m & 73 Sq.m . Kindly confirm the size of the Buildings to be followed. And also please furnish the typical layout plan and sections for 'D' Type & 'E' Type residential quarters.	D type= 120 sqm & E Type=73 Sqm.
169	Volume II (TS) & Volume – IIA, Scope of works				E6-Civil Works-Clause 1.4 b), Page 56 to 84 & Part 1, Schedule – 2C, SI NO – 3, Page 56 of 90	As per specification control room building area is given as ground floor:38x13 m, ground floor portico:5x5 m, first floor:19x13 m. But in price schedule, the same is indicated as "ground floor:38x11 m, ground floor portico:5x7 m, first floor:12x11 m" . Kindly clarify the size of Building to be followed. And also please furnish the typical layout plan and sections for control room building.	Proposed to have two nos building. (1) 220 KV GIS Building shall be of size 25.5 mtrsX 11 mtrs & height approx 10 mtrs, sizes shall be Column centre to centre (However the bidder to design the same considering the safety of the building and 220 KV GIS system). (2) 33 KV GIS Cum Control room building (GF:14.5 mtrsX25mtrs & same area in FF, & height of each floor shall be appro 5 mtrs ,sizes shall be Column centre to centre. Accordingly revised BPS for the same is
170	Volume II (TS)				E6-Civil Works-Clause 16.10, Page 53 to 84 & Clause 1.4 b), Page 56 to 84	In line with clause no:16.10, the minimum thickness of external walls shall be 230mm. But as per clause no:1.4 b), it is indicated as " external walls shall be 250mm thick". Kindly confirm the Thickness of Brick wall to be adopted.	Thickness of the wall to be designed as per the loading on the wall. The local brick size is 250mmX125mmX75mm.
171	Vol- II A,Scope of work				2.0 Brief scope of work Point no: X & Part-I Schedule-2C (For Substation) Description of items (schedule -2C-SS) B - Civil Works Point 26 & 26.2	There is a difference in size of the GIS Buildings in both the referred clauses. Please confirm the size of the GIS Buildings. We understand that the given Building Size is indicative only however bidder shall design building size based on their proposed GIS equipment size. Please confirm our understanding is correct .	Proposed to have two nos building. (1) 220 KV GIS Building shall be of size 25.5 mtrsX 11 mtrs & height approx 10 mtrs, sizes shall be Column centre to centre (However the bidder to design the same considering the safety of the building and 220 KV GIS system). (2) 33 KV GIS Cum Control room building (GF:14.5 mtrsX25mtrs & same area in FF, & height of each floor shall be appro 5 mtrs ,sizes shall be Column centre to centre. Accordingly revised BPS for the same is
172	Vol- II A,Scope of work				2.0 Brief scope of work Point no: X & Part-I Schedule-2C (For Substation) Description of items (schedule -2C-SS) B - Civil Works Point 26 & 26.2	We presume that the given size of GIS building is for present scope of bays only i.e 220kV GIS bays -5Nos. Please confirm.	Also to accommodate the future expansion as proposed.

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173	Vol- II A,Scope of work				2.0 Brief scope of work Point no: X & Part-I Schedule-2C (For Substation) Description of items (schedule -2C-SS) B - Civil Works Point 26 & 26.2	We presume that the given size of GIS building is for present scope of bays only i.e 33kV GIS bays -10Nos. Please confirm.	Also to accommodate the future expansion as proposed. A typical layout for the 33 KV GIS cum Control room building is attached.
174	Layout				Tender Drawing	We presume that the typical layout shown is indicative only & bidder can design the layout as per the actual requirement. Kindly confirm.	A typical layout for the 33 KV GIS cum Control room building is attached. In case it needs further modification the bidder can make at his own risk. However the size of the building and minimum requirement are indicated in the layout.
175	Layout				Tender Drawing	We understand that bidder can also propose SF6 bus duct in place of EHV Cable for 220kV level . Please confirm.	SF6 Bus duct to be considered for 220 KV side. No 220 KV cable will be used.
176	Vol I, Bidding instruction				Clause 2.0 in Bidding instruction - Brief Scope of Work, SI no i) 20.7 in Bid price schedule (Page No:9/90)	With reference to clause No:2 of bidding instruction Power transformer, PLCC (Indoor) and RTU are free issue material. Whereas SI No:20.7 in bid price schedule RTU is in contractor's scope. Please clarify.	1) PLCC indoor panel not required. 2) RTU will be supplied by OPTCL.
177	Vol I, Bidding Instruction and Vol I A COC				CI No: 33 in Bidding instruction (Page No:23 of 54). and CI No: 10.1 in SCC ( Page No: 33 of 178)	With reference to the clause no:33 in bidding instruction project completion period has mentioned 24Months where as clause no: 10.1 in COC completion period is 30months. Kindly clarify the completion period.	The project completion period is 24 Months from the date of issue of NOA.
178	Vol I, Bidding Instruction and Vol I A COC				CI No:5.1.2 (III) in Bidding Instruction page no: 13 of 54	As per referred clause, we understand that the offered GIS should be operating satisfactorily in India for last 2 years as on bid opening date. For the purpose of meeting this qualification criteria (i.e 2 years satisfactory operation criteria in India), the factory from which the GIS is supplied only would be considered. Please confirm that our understanding is correct.	It is clarified that performance of the GIS equipments will be considered from the same manufacturing unit from where the GIS equipments are offered. <b>QR revised as below:-</b> <b>Equipment qualifications:</b> SF6 Gas Insulated Switchgear <b>(III) The 220 KV or above voltage class SF6 Gas Insulated switchgear from GIS supplier/manufacturer must have been supplied to at least ONE (01) no.. of GIS sub stations (with Min 4 bays in substation) in India and must have been operating satisfactory of the said GIS substations for a minimum period of ONE (01) year., as on the date of bid opening.</b>
179	Vol I, Bidding Instruction and Vol I A COC				CI No:1 CI No:1in Bidding instruction (Page No: 7 of 54)	We understand from refereed clause i.e the Odisha Industrial Infrastructure Development Corporation (IDCO) is funding for this project. Whether any project benefits are available for this project? Please confirm.	No benefit is available for this project.
180	Vol I, Bidding Instruction and Vol I A COC and Vol-1A, Special conditions of Contract				CI No:1in Bidding instruction (Page No: 7 of 54) and CI No1.3 in SCC (Page No: 7 of 54) (page No: 7 of 178)	With reference to the clause no:1 in bidding instruction the project shall be executed and funded by IDCO where as clause no: 1.3 in SCC the project shall be executed and funded by OPTCL. Kindly clarify who is funding for this project..	To be funded by IDCO and to be owned by OPTCL.

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181	Vol IA, Section - SCC				Clause 4.0, page 9 of 178	In case of introduction of new taxes/ duties like GST, the same shall be paid extra at actuals for all items including bought out finished goods which will directly be despatched from our sub-vendors work, please confirm.	As per tender condition stipulated for Bought out and Direct supply items. Bought out items to be inclusive of tax. Taxes as per actuals will be paid for the Direct supply materials.
182	Vol IA, Section - SCC				Clause 4.2, page 10 of 178	We understand from the referred clause that Contractor need not included Entry Tax/ Octroi for both bought out as well as direct items in their price. Same will be reimbursed to Contractor along with payment bill.	As per tender condition. Octroi/Entry tax will be reimbursed on both Direct & Bought Out supply items against documentary evidence.
183	Vol IA, Section - SCC				Clause 4.4, page 10 of 178	We do not envisaged to conduct any type tests. However, we will submit valid type test reports (not older than 10Years) as per ref clause no: 5.1.2 - (iv) in Bidding Instruction.	Please refer CI 5.1.2(iv), the type test reports to be submitted. Type test will be repeated in case type test reports are older than 10 years or the reports are incomplete or not satisfactory at no extra cost and to OPTCL without affecting the completion time.
184	Vol IA, Section - SCC				Clause 4.5, page 10 of 178	We understand from the referred clause that Contractor need not included Service Tax in their prices. Same will be reimbursed along with the contractor payment bill.	Yes, service tax to be reimbursed for Erection and AMC contract.
185	Vol IA, Section - SCC				Clause 8.1 (i), page 28 of 178	We understand that advance will be interest free. Please confirm	Advance shall be 10% interest bearing.
186	Vol IA, Section - SCC				Clause 16.0, page 36 of 178	We request you to kindly arrange construction power within the project site at one single point. Please confirm.	It is contractor's responsibility as per the tender condition. Ref CI No. 16, Vol-IA-SCC condition of contract.
187	Vol IA, Section - SCC				Clause 17.0, page 37 of 178	We request you to please allow us to set up our site office and erection facilities within the project site or provide us a land near to site. This will enable us to monitor the project in a better away and complete the project on time. Please accept our request.	Site office & erection facility can be set within the project area.
188	Vol IB				Schedule 15 in Bid proposal sheets, page 54 of 56	The requirement of schedule 15 is not clear. Whether any project benefits are available for this project? If yes, kindly elaborate the same.	No project benefits are available for this project.
189	Vol IA - Section GCC				CI No: 7.1 Construction of the Contract - Page 61 of 178	We understand that OPTCL will issue the separate contract for AMC works after completion of Guarantee period. Please confirm our understanding is correct.	Yes. Separate contract for AMC as per BPS Schedule-IB-2D-SS
190	Price Schedule				SI No:28.1 in price schedule - 2C-SS	The quantity of refereed clause specified as 3 LS which we understand that 3 stands for 3years. The unit rate to be quoted for 1 year. Please confirm.	Yes. The unit rate is LS basis for each year for 03 (Three) Years.
191	Vol-IA Bidding Instruction				CI No:41.1 - Contract performance guarantee	From the refereed clause we understand that performance guarantee shall be submitted 10% of contract value. This contract value excludes AMC value. For AMC contract, a separate PBG will be submitted. Please confirm our understanding is correct.	Yes. Separate performance BG for Supply & Erection Contract and AMC Contract.
192	Vol-I Conditions of contract				Section - E30 GIS System - Annual Maintenance Contract (Page no:	We request you to kindly release the payment in quarterly instead of half yearly for AMC works. Please accept our request.	As per tender condition provided.
193	Price Schedule				SI No:28.1 in price schedule - 2C-SS	Since OPTCL planned to issue the AMC as a separate contract, bidders shall quote the same as a separate schedule. If yes, please issue a format or bidder can quote in their own format.	Yes. Separate contract for AMC as per BPS Schedule-IB-2D-SS

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194	Volume -II	Technical Specification			Section - E30 GIS System - Annual Maintenance Contract (Page no: 62/65)	We understand that after guarantee period OPTCL will take over the substation and issue the new contract for AMC works to the bidder. Please confirm our understanding is correct.	Yes.
<b>SIEMENS LIMITED PRE BID OBSERVATION</b>							
195	I		Invitation for Bids (INV)	5.0 - III	(Bidder's Qualification Criteria) BQC (Qualifying Requirements) QR	Siemens requests OPTCL to amend the said clause as under: The 220KV or above voltage class SF6 gas Insulated switchgear from GIS supplier / manufacturer must have been supplied to at least <del>two (02) One (01) nos.</del> of GIS substations (with Min 4 Bays) in India and the 220KV or above voltage class GIS equipment/ Bays, must have been operating satisfactorily at minimum <del>Two (02) One (01) No.</del> substation in India for a minimum period of <del>Two (02) One (01) year,</del> as on date of bid opening.	It is clarified that performance of the GIS equipments will be considered from the same manufacturing unit from where the GIS equipments are offered. <b>QR revised as below:-</b> <b>Equipment qualifications:</b> SF6 Gas Insulated Switchgear (III) The 220 KV or above voltage class SF6 Gas Insulated switchgear from GIS supplier/manufacturer must have been supplied to at least <b>ONE (01) no.</b> of GIS sub stations <b>(with Min 4 bays in substation)</b> in <b>India</b> and must have been operating satisfactory of the said GIS substations for a minimum period of <b>ONE (01) year,</b> as on the date of bid opening.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
196	I		Invitation for Bids (INV)	5.1.3, 5.1.4 & 5.1.5	(Bidder's Qualification Criteria) BQC & Qualifying Requirements) QR:	<p>This being a GIS substation tender, we request you to please exclude the qualification requirements for the 220KV Transmission line works. Siemens is the leader of this technology and our GIS sub stations are in successful operation in many utilities/ Industries</p> <p>However, we would carry out Transmission line job in accordance with your specification/ approved sub vendors.</p> <p>We have been executing many projects with various towers material. Accordingly, we have a wide basket of vendors for towers. Kindly do not insist for submission of the undertaking from the transmission line tower manufacturer, which may limit quality of material.</p>	<p>Bidder's Qualification Criteria (BQC)/ Qualifying Requirements(QR) shall be in line with OPTCL tender specifications. Refer Bidder's Qualification Criteria- Vol-I-Inst to Bider Cl. 5-</p> <p><b>(1)FOR GIS SS:-</b> It is clarified that performance of the GIS equipments will be considered from the same manufacturing unit from where the GIS equipments are offered. <b>QR revised as below:- Equipment qualifications:</b> SF6 Gas Insulated Switchgear (III) The 220 KV or above voltage class SF6 Gas Insulated switchgear from GIS supplier/manufacturer must have been supplied to at least <b>ONE (01) no..</b> of GIS sub stations <b>(with Min 4 bays in substation)</b> in <b>India</b> and must have been operating satisfactory of the said GIS substations for a minimum period of <b>ONE (01) year</b>, as on the date of bid opening.</p> <p><b>TRANSMISSION LINE:-</b> <b>OR</b></p> <p>The Bidder who meets the QR as indicated in Cl. No. 5(PARA-A)-Vol-I and does not meet the QR as indicated in Cl. No.5(PARA-B) above, can participate in the tender, provided they submit the following undertaking in the Non-Judiciary stamp paper(worth Rs.100/-).</p> <p>We M/S----- do hereby undertake that, if the contract (Sr. G.M-CPC-Tender-GIS Infocity-II-Package-23/2012-13) is awarded to us we will purchase the tower structural &amp; the line materials from the OPTCL approved vendor &amp; Erection of the said materials will be carried out through the approved Rate Contract holder of OPTCL".</p> <p>* NAME OF THE RATE CONTRACT HOLDERS OF OPTCL &amp; VENDOR LIST FOR THE STRUCTURAL MATERIALS MAY BE COLLECTED FROM THIS OFFICE."</p>

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197	I		Invitation for Bids (INV)	5.0 - V	The bidder shall undertake operation and maintenance for Three (03) years of the GIS substation after its <b>completion</b> and shall depute..... The bidder shall keep necessary spares at substation to carry out the maintenance of GIS during the operation of <b>three (03) years after the guarantee period</b> as stipulated in the tender specification.	There is a lot of ambiguity in the scope. Please confirm whether the requirement is of an Annual Maintenance Contract (AMC) for GIS or for Annual Maintenance Contract (AMC) for complete substation or for operation & maintenance of the GIS or for operation & maintenance of the substation. Also confirm the whether the AMC/ O&M starts from 3 years after the completion/ commissioning of the substation or for 3 years after the guarantee period. Also, kindly clarify & confirm the following points: - type of AMC required (Breakdown AMC / Annual Maintenance) - No. of personnel to be deputed at site - the equipments to be covered under the AMC contract - what will be common facilities like car parking, seating, lodging, etc. - who shall provide the consumables for the maintenance.	Bidders are requested to kindly go through the details provided in the Technical Specification No. TS-GIS system-E30 of Volume-II of Technical Specifications for Comprehensive AMC. 1. AMC will commence just after the guarantee period of substation for 03 years round the clock. Refer the Item No. 1 of AMC Contract-BPS-2D-SS..
198	I		Invitation for Bids (INV)	2.0 - XIV	Comprehensive AMC for 03 years after the <b>guarantee period</b> round the clock.		
199	I		Instruction to Bidders (INB)	23	OPTCL shall allow purchase preference ..... under the existing policies of Govt. of India/ Govt. of ODISHA	Siemens requests to kindly clarify the existing policy & the evaluation criteria in such case.	In this package there is no purchase preference. The evaluation of the bid will be as per OPTCL evaluation criteria.
200	I		Invitation for Bids (INV)	5.1.1 & 5.1.2 (iv)	220 kV or above voltage class GIS modules must be type tested at internationally reputed testing laboratories i.e. KEMA (Holland), CESI (Italy), CERDA (France) & PHELA(Germany). Type test reports shall not be older than Ten (10) years, as on date of bid opening.	Few Type test reports are older than 10 years. As the design has not undergone any change, we do not envisage the repetition of these type tests. However, in case of award, these type tests shall be conducted before the commencement of supply. Please confirm if the same is acceptable to OPTCL.	As per tender condition. Requirement of type testing as per OPTCL tender specifications. Refer Vol-I-CI 5.(A)-IV.
201	IIA		Scope of Works	8	Unless otherwise specified in respective section, all equipment shall be subjected <b>routine, acceptance and type test</b> as covered and specified in any standard in presence of the authorized representative of the employer.	We understand that the type tests shall not be repeated for this project. Please confirm if our understanding is correct.	The requirements mentioned are clear in itself. Type test reports should not be older than 10 years.
202	IIA		Scope of Works	1	General:- Design, manufacture, assembly, erection ..... storage of <b>230 kV gas insulated switchgear (GIS)</b> , and accessories, start up ..... For the proposed <b>230/33kV sub-station indoor .....</b>	We request OPTCL to amend the clause as under: Design, manufacture, assembly, erection ..... storage of <b>230 220 kV gas insulated switchgear (GIS)</b> , and accessories, start up ..... For the proposed <b>230/33kV 220/33 kV sub-station indoor .....</b>	Noted. 220/33 KV GIS Sub-station instead of 230/33 KV.



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203	IIA		Scope of Works	1	Training:- Training in maintenance for the Engineers from OPTCL for 4 weeks at manufactures site. Training in operation for the Engineers from OPTCL for 4 weeks at site. Factory inspection/acceptance test at the	Kindly inform the number of Engineers from OPTCL which are to be trained. Also, pls note that the lodging, boarding, to & fro conveyance charges, local conveyance etc. has to be borne by OPTCL.	1) 10 Nos. Engineers of OPTCL will be given GIS Training for 15 days. (2) If the training is to be given outside India, to & fro, first reaching the country (outside India) & from Outside India to India, shall be borne by OPTCL & all other expenses shall be borne by the Agency.(3) If the training is given inside India the to and fro and lodging expenses shall be borne by OPTCL and all other expenses shall be borne by the Agency.
204	IIA		Scope of Works	2.0 - vii)-3	(c) Receiving the 02 Nos power transformers (220/33 KV, 40 MVA) from the store of OPTCL & construction of transformer foundation, its installations, its testing &	Siemens request OPTCL to kindly inform the location of OPTCL store from where these transformers shall be received.  Siemens also requests OPTCL to provide the drawings/ GA of these transformers in order to estimate the size of foundation.	Weight & Size of the Power Transformer are indicated in the BPS, refer Vol-IB-2C-CI 6.1. The transformers shall be delivered at Site.
205	IIA		Scope of Works	2.1.1 - ii)-2	Erection, testing & commissioning of ..... Indoor PLCC/RTU equipment (PLCC Panels) at both the ends.	Kindly inform the location of the other ends where the PLCC Panels are to be erected, tested & commissioned. Also please confirm the availability in the existing PLCC panels to mount the equipments.	In this package there is no PLCC. FOTS panels are to be installed at other end of the sub-station and also in the proposed GIS S/S. FOTS panels are in bidders scope of supply, installation and commissioning. Location of other end Mendhasal S/S and Narendrapur S/s.
206	II (Part-I)		Technical Specification For 220/33 KV Gas Insulated Switchgear	1	General Specification:- The Bus of the 220 KV & 33 KV GIS System shall be of copper of adequate size and should be capable of with standing the short circuit current level of 40 KA & 31.5 KA respectively for 3 sec.	Offered 220kV GIS is with Aluminium Bus bars and successfully type tested for short circuit current of 40kA	220kV GIS is with Aluminium Bus bars of rated current rating 2000 Amp at 50 deg centigrade and should have been type tested for short circuit current of 40kA for 3 sec.
207	II (Part-I)		Technical Specification For 220/33 KV Gas Insulated Switchgear	3.1	Enclosures shall be of single phase encapsulation for 245kV for both the bus bars and the feeder section bays.	Siemens shall offer single phase encapsulated 220 KV GIS except the Bus bars	220 KV GIS Enclosures shall be of <b>single-phase/three-phase</b> encapsulation having type tested.
208	II (Part-I)		Technical Specification For 220/33 KV Gas Insulated Switchgear (GIS)	3.1	Tenderer shall confirm the nominal rating of GIS components at 50°C . . .	Please see that there is a discrepancy in the specification We understand that the actual current requirement shall be less than 3150A and therefore, the nominal rating at 40 degrees C shall be acceptable to OPTCL.	Tenderer shall confirm the nominal rating of GIS components at 50°C

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209	II (Part-I)		Technical Specification For 220/33 KV Gas Insulated Switchgear	3.2.1.2	Circuit Breaker Technical Parameters: Nominal operating current (at 40° C) = 3150A		Circuit Breaker Technical Parameters:Nominal operating current (at 50° C) = 3150A
210	II (Part-I)		Technical Specification For 220/33 KV Gas Insulated Switchgear	3.2.2.2	Disconnecter Technical Parameters: Rated current = 3150/2000 A at 50° C		Disconnecter Technical Parameters: Rated current = 2000 A at 50° C .
211	II (Part-I)		Technical Specification For 220/33 KV Gas Insulated Switchgear	3.1.1	Continuous bus lengths with out gas segregation shall not be acceptable.	Since the bus bars are passive modules, the continuous bus lengths with out gas segregation shall be acceptable. Also, this arrangement facilitates the arc to move in a wider space as compared to segregated bus lengths where the arc is concentrated in a shorter space and creates a high pressure. This may cause damage/ injury/ accidents etc. Therefore, we request you to kindly allow bus lengths without segregation	Continuous bus lengths with out gas segregation shall not be acceptable in line with OPTCL specification clause no. 3.1.1.Refer Vol-II-TS-E-30.
212	II (Part-I)		Technical Specification For 220/33 KV Gas Insulated Switchgear	3.2.7 (6)	Potential Transformers :- VA burden shall be 100VA	The protection/ metering burdens are limited to 50 VA and hence, we shall offer PTs with 50VA burden. Pls confirm if the same is acceptable to OPTCL.	As per tender specification (Ref Cl No. 5,E-30-Vol-II). The VA burden shall be considered as 100VA. However the details VT spec including burden shall be finalized during engineering stage based on protection study.
213	IB		Schedule-2A-SS (Equipment/ Materials Price Break-up of Ex-works Prices against Package-GIS INFOCITY-II)	S. No. 2.2	36 KV, 1250 A, 25 kA for 3 sec, SF6 gas insulated line feeder bay modules.....	The quantity for the line feeder bay modules have been shown as "7 Set"; However; in Schedule 2B-SS, S. No. 2.2 & Schedule 2C-SS, S. No. 2.2 the quantity for the same is shown as "5 Set".  Kindly inform the correct quantity.	In the BPS, the Feeders quantity shall be considered as under: 1. Item no. 2.1 – 33 KV Transformer feeders - 2 Nos. 2. Item no. 2.2 - 33 KV Feeders - 7 Nos. 3. Item no. 2.4 - 33 KV Bus Coupler - 1 No. 4. Item No. 2.5 - 33 KV Station Transformer feeder stands deleted.Total No. of Circuit Breakers Bays - 10 Nos. (one of the feeder bay can be utilised for station transformers (2X315 KVA,33/43).

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
214	IB & SLD & Scope of Work(II)		Schedule-2A-SS (Equipment/Materials Price Break-up of Ex-works Prices against Package-GIS INFOCITY-II)	S.No. 2.5 & 2.0(vii) (a) (2)	36 KV, 800A, 25 kA for 3 sec , SF6 gas insulated Line feeder bay module.....	We envisage that there is no requirement of this line item i.e. complete GIS bay for the connection of earthing transformer.	In the BPS, the Feeders quantity shall be considered as under: 1. Item no. 2.1 – 33 KV Transformer feeders - 2 Nos. 2. Item no. 2.2 - 33 KV Feeders - 7 Nos. 3. Item no. 2.4 - 33 KV Bus Coupler - 1 No. 4. Item No. 2.5 - 33 KV Station Transformer feeder stands deleted.Total No. of Circuit Breakers Bays - 10 Nos. (one of the feeder bay can be utilised for station transformers (2X315 KVA,33/.43).
215	IB		Package-23 GIS-INFOCITY-II-(SS- 2C)	From S. No.1.1 to 1.5	Switchyard gantry/portal structure foundations..... Equipment foundations:..... EXCAVATION FOR PREPARATION OF FOUNDATION... Design, Engineering, Providing and laying of plain cement ..... Open cast foundation for the above column/equipment.....	We Understand that Quantities (Exc.,PCC,RCC) for item no. 1.1 & 1.2 i.e. towers & Equipments are included in item no. 1.3,1.4 & 1.5	Yes.
216	General				General	Please Provide preliminary soil investigation report.	In bidders scope.
217		Vol- I	Part III	General	Layouts	Towers & Equipments are shown in 220kV & 33kV GIS Building area in one of the tender drawing (Layout). We envisage that there is no tower & equipment is on the site & no dismantling is in bidders scope. Please confirm the same.	Revised sub-station layout is enclosed. No dismantling of towers in the proposed GIS sub-station location.
218	IA		GCC	GCC 12.0	12.0 TIME - THE ESSENCE OF CONTRACT 12.1 The time and the date of completion of the Contract as stipulated in the Contract by the Employer without or with modifications, if any, and so incorporated in the Letter of Award, shall be deemed to be the essence of the Contract.	12.0 TIME - <del>THE ESSENCE PERIOD</del> OF CONTRACT 12.1 The time and the date of completion of the Contract as stipulated in the Contract by the Employer without or with modifications, if any, and so incorporated in the Letter of Award, shall be <del>important for</del> <del>deemed to be</del> <del>the essence of</del> the Contract. <b>In case of delay, the provision of Liquidated Damages shall apply. Payment of such Liquidated Damages shall be the sole remedy for delay.</b>	As per Tender Condition Ref Vol-IA-GCC, Cl 12. In case of delay Penalty will be imposed as per tender specification.

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219	IA		GCC	GCC 15.1 Warranty	Additional Paragraph	Siemens requests the addition of the following paragraph: "Except for the express warranties stated in the Contract, Contractor disclaims any other express or implied warranties, including but not limited to implied warranties of merchantability and fitness for a particular purpose, or otherwise. At the end of the warranty period, the Contractor's liability shall cease. In respect of goods not covered by the first paragraph of this clause, the Purchaser shall be entitled to the benefit of such guarantee given to the Contractor by the original manufacturer of such	<a href="#">As per tender specification Vol-IA-GCC- CI No. 15.0.</a>
220	IA		GCC	GCC 42.0 Force Majeure	b) Acts of any Government, domestic or foreign, including but not limited to war, declared or undeclared, priorities, guarantees, embargoes.	b) Acts of any Government, domestic or foreign, including but not limited to war, declared or undeclared, priorities, guarantees, embargoes, <b>impediments arising out of change in national or international foreign trade and customs, embargo or other sanctions.</b>	<a href="#">As per tender specification Vol-IA-GCC- CI No. 42</a>
221	IA		GCC	GCC 42.2 Force Majeure	Additional Paragraph	Siemens requests the addition of the following paragraph: "If works are suspended by the force majeure conditions lasting for more than six months, Either party shall have the option to cancel, this Contract in whole or part thereof, at its discretion."	<a href="#">As per tender specification Vol-IA-GCC- CI No. 42</a>
222	IA		SCC	SCC 30.4 Spares	The contractor will provide the owner with the manufacturing drawings, catalogues, assembly drawings and any other document required by the owner so as to enable the owner to identify the recommended spares. Such details will be furnished to the owner as soon as they are prepared but in any case not later than six months prior to commencement of manufacture of the corresponding	The contractor will provide the owner with the <del>manufacturing drawings</del> , catalogues, assembly drawings and any other document required by the owner so as to enable the owner to identify the recommended spares. Such details will be furnished to the owner as soon as they are prepared but in any case not later than six months prior to commencement of manufacture of the corresponding main equipment.	<a href="#">Yes, acceptable to OPTCL.</a>

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
223	IA		SCC	SCC 30.9 Spares	The contractor shall guarantee the long term availability of spares to the owner for the full life of the equipment covered under the contract. The contractor shall guarantee that before going out of production of spare parts of the equipment, he shall give the owner at least twelve (12) months advance notice so that the latter may order his bulk requirement of spares, if he so desires. The same provision will also be applicable to Sub Contractor of any spares by the contractor or his Sub Contractors Further, in case of discontinuance of manufacture of any spares by the contractor or his Sub Contractors Further, in case of discontinuance of manufacture of any spares by the contractor or his Sub Contractors, the contractor will provide the owner, two years in advance, full manufacturing drawings, material specifications and technical information required by the owner for the purpose of manufacture of such items.	The contractor shall guarantee the long term availability of spares or its <b>functional equivalents</b> to the owner <b>for a period of 10 years from completion of works the full life of the equipment covered under the contract.</b> The contractor shall guarantee that before going out of production of spare parts of the equipment, he shall give the owner at least twelve (12) months advance notice so that the latter may order his bulk requirement of spares, if he so desires. The same provision will also be applicable to Sub Contractor of any spares by the contractor or his Sub Contractors Further, in case of discontinuance of manufacture of any spares by the contractor or his Sub Contractors, the contractor will provide the owner, two years in advance, <del>full</del> <b>manufacturing drawings</b> , material specifications and technical information required by the owner for the <b>identification purpose of manufacture</b> of such items.	As per tender condition CI No. 30.9 S.C.C-Vol-IA, except manufacturing drawing.
224	IA		GCC	GCC 20.0	Additional Paragraph	Siemens requests the addition of the following paragraph: "Notwithstanding anything contained in the contract, the contractor shall not be liable for any indirect, consequential, incidental, punitive or special damages including but not limited to loss of production, loss of profit or revenue, payment of interest and other financing expenses, loss of information and data, loss of use of equipment power system, cost of purchase or replacement power. Per event damage to any Purchaser property shall be limited to Rs. 2.5 Million. The Contractor's total aggregate liability towards Purchaser shall be limited to the Contract Price. These limitations of liability shall also apply for the benefit of Contractor's subcontractors, employees and agents. All remedies mentioned in the contract for any default shall be sole & exclusive remedies."	As per tender specification Vol-IA-GCC- CI No. 20.0.
225	IA		Formats	ABG /BG formats PBG formats		Bank Guarantee formats should be close ended with respect to Validity and Value, with a jurisdiction clause, a claim clause, and a properly worded BG return clause.	The BG Formats shall be followed as per OPTCL tender specifications enclosed at Annexure- Vol-IA-condition of contract..

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
226	IB		Schedule-2A-SS (Equipment/Materials Price Break-up of Ex-works Prices against Package-GIS INFOCITY-II)	2.3	36 KV , 25 kA for 3 sec, 3- phase Isolated , SF6 gas insulated , metal enclosed 2000 A bus bars.....	We envisage that 33kV GIS module has double bus bar scheme. Please confirm the same.	The 33KV Cubicle type GIS shall be with Double Bus bar(One bus shall be as Main & the other shall be as Reserve/Transfer Bus). SLD for 33 KV GIS scheme is enclosed. The Main 33 KV Bus shall be 2000 Amp current rating and the reserve bus shall be of 1250 Amp current rating. The short circuit current rating shall be 25 KA for 3 sec.
227	IB		Schedule-2A-SS (Equipment/Materials Price Break-up of Ex-works Prices against Package-GIS INFOCITY-II)	2.1, 2.2	36 KV , 25 kA for 3 sec, 3- phase Isolated , SF6 gas insulated.....	Please provide us the number of incoming line feeders, outgoing line feeders, incoming transformer feeders & outgoing transformer feeders.	In the BPS, the Feeders quantity shall be considered as under: 1. Item no. 2.1 – 33 KV Transformer feeders - 2 Nos. 2. Item no. 2.2 - 33 KV Feeders - 7 Nos. 3. Item no. 2.4 - 33 KV Bus Coupler - 1 No. 4. Item No. 2.5 - 33 KV Station Transformer feeder stands deleted.Total No. of Circuit Breakers Bays - 10 Nos. (one of the feeder bay can be utilised for station transformers (2X315 KVA,33/.43).
228	IB		Schedule-2A-SS (Equipment/Materials Price Break-up of Ex-works Prices against Package-GIS INFOCITY-II)	2.1to 2.5	36 KV , 25 kA for 3 sec, 3- phase Isolated , SF6 gas insulated.....	We envisage that all modules has rating of 36kV, 1250A except one module having rating 36kV, 800A and the rating of bus bar is 36kV, 2000A. Please confirm the same.	The requirements mentioned are clear in itself. The rating of CB shall be 36kV, 1250A,25 KA for 3 Sec. 33 KV MAIN BUS Current Rating: 2000 Amp (short ckt current 25 KA for 3 sec) & 33 KV RESERVE/TRANSFER BUS Current Rating: 1250 Amp (short ckt current 25 KA for 3 sec).

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
229	IB & II (Part-I)		Schedule-2A-SS & Technical Specification For 220/33 KV Gas Insulated Switchgear	2.1 to 2.5 & APPEND IX-I	Fault current level	We envisage that the fault current level is 25KA for 33kV GIS (including all bays & bus bar). Please confirm the same.	Short circuit current rating for 33 KV GIS shall be 25 KA for 3 sec.
230	II (Part-I)		Technical Specification For 220/33 KV Gas Insulated Switchgear	SLD	SLD	Please provide us the SLD for 33KV Switchboard.	The Single line Diagram for 33KV GIS system is enclosed.
231	II (Part-I)		Technical Specification For 220/33 KV Gas Insulated Switchgear	CT-VT Data	CT-VT Data	Please provide us the CT/VT details ( No. of cores, burden, class for protection & metering).	The details of the CT/VT are mentioned in the technical specification. Refer TS-Vol-II-E-30 for GIS spec.
232	II (Part-I)		Technical Specification For 220/33 KV Gas Insulated Switchgear	General	General	We envisage that no dummy panel is required with 33kV GIS.	Dummy panels are to be provided wherever necessary to meet the OPTCL requirements.
233	IB		Package-23 GIS INFOCITY-II-SCHE	General	General	We envisage that no spares to be considered being GIS is a maintenance free switchgear. Only Gas filling kit to be considered. Please confirm the same.	Please refer to the tender specifications of the OPTCL for scope clarity. Ref Vol-IIA-Scope of work( CI No. 16-Annexure-II & CI No. 17-Annexure-III) & Vol-II-TS-E-30.(Refer CI No. 3.2.12,3.2.13,3.2.20 & 3.2.23).
<b>TOSHIBA CORPORATION - PRE-TENDER CLARIFICATIONS FOR 220 KV &amp; 33 KV OF GIS</b>							
234	General: Enclosure (page 4/65) & 3.1.13 Switch gear enclosures				The gas filled enclosures shall comply to the pressure vessel code is applied in the country of manufacturer and shall be suitable for purchaser's environmental condition.	We being the Japanese Manufacturer, the pressure vessel is designed, fabricated and tested in line with "Pressure Vessel Construction Code of Japanese Government" by Ministry of Labour which is equivalent to ASME.	Bidder to ensure that the same shall be suitable for purchaser's environmental condition in line with the tender specification. Ref Vol-II-TS-E-30, CI No. 3.1.13)

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
235		General: Cast Aluminium (page 5/65)			Internal surfaces (cast-aluminium) – Seeevenax protective paint RAL 7035.	We would like to clarify that that internal surface painting shall be followed as per manufacturer standards and special type treatment has already been considered for dust proof.	The Internal painting of GIS enclosures shall be as per manufacturer standard practices, However the external paint shall be in line with OPTCL requirements.
236	2 (x) - Enclosure & 3.1 - Equipment specification				Aluminium alloy  The GIS shall be made of tubular Aluminium alloy/steel enclosures and filled with SF6 gas for insulation.	We understand that the GIS shall be made of tubular Aluminium alloy/steel enclosures in line with Clause no. 3.1 of the OPTCL Specification.  Please confirm.	The GIS enclosure made of tubular Aluminium alloy shall be acceptable in line with OPTCL specifications. However, if any component, other than the enclosure of GIS can be of steel if required so.
237	3.1.2 - Conductor Type and Contacts				Conductors shall be made of copper.	Conductors shall be made of copper or aluminium  Please confirm.	<b><i>The Bus bar conductors made of Aluminium having type tested with short circuit current rating 40 KA for 3 sec. 220kV GIS is with Aluminium Bus bars of rated current rating 2000 Amp at 50 deg centigrade and should have been type tested for short circuit current of 40kA for 3 sec. 33 KV MAIN BUS Current Rating: 2000 Amp (short ckt current 25 KA for 3 sec) &amp; 33 KV RESERVE/TRANSFER BUS Current Rating: 1250 Amp (short ckt current 25 KA for 3 sec).</i></b>
238	3.2.9.1 - SF6/AIR Bushings				Outdoor SF6 to air bushings, for the connection between the GIS and overhead lines or conventional air insulated equipment shall be furnished where specified.	We understand from the specifications of OPTCL that SF6 Gas to Air Bushings of Porcelain or Composite type can be proposed.  Please confirm.	SF6 Gas to Air Bushings for feeder & the transformer feeder can be of porcelain/composite type insulators having type tested.
239	Clause 3.2.10 - EHV Power Cables				EHV-POWER CABLE CONNECTION	As per Single Line Drawing enclosed with the Tender Documents, any of the connections of 220KV GIS do not involve cable transition. (Incoming Feeders: GIB with termination of Gas/Air Bushings; Transformer Feeders: GIB with termination of Oil/Gas Bushings)  Please confirm that Clause 3.2.10 is not applicable for 220KV GIS Portion.	All the Incomer feeders of 220 KV shall be with Gas Insulated Bus duct with termination of SF6 Gas to Air Bushings and the transformer feeders shall be with Gas Insulated Bus duct with termination of SF6 Gas to Air Bushings.
240	3.2.18 - Wiring & 3.2.19 - Low voltage cables & control cables				The size of the conductors shall be suitable enough for the expected usage, but it must not be less than 2.5 sqmm.  The size of the above cables is more than 2.5 sqmm.	The size of the conductors shall be more than 1.5 sqmm.  Please confirm.	Bidder to ensure that technical requirements shall be in line with the OPTCL tender specification.
241	21 - Technical particulars of 33KV Cubicle GIS.				As per Sr. No. 10.2, the Short Circuit Rating is mentioned as 31.5KA. However in the BPS PART-I, SCHEDULE-2A, the same is mentioned as 25KA.	We understand that the Short Circuit Rating for 33KV Cubicle GIS shall be 25KA in line with OPTCL BPS PART-I, SCHEDULE-2A.  Please Confirm.	Short circuit current rating for 33 KV GIS shall be 25 KA for 3 sec.



SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
242	BPS PART-I, SCHEDULE-2A				As per Sl. No. 2.2 the quantity of 33KV Feeder bays is mentioned as 7 Sets. However, at Sr. No. 24.2.2 feeder protection relay panel quantity is mentioned as 5 Nos.	We understand that the Quantity of feeder protection relay panel against Sr. No. 24.2.2 shall be considered as 7 Nos.  Please Confirm.	In the BPS, the Feeders quantity shall be considered as under: 1. Item no. 2.1 – 33 KV Transformer feeders - 2 Nos. 2. Item no. 2.2 - 33 KV Feeders - 7 Nos. 3. Item no. 2.4 - 33 KV Bus Coupler - 1 No. 4. Item No. 2.5 - 33 KV Station Transformer feeder stands deleted.Total No. of Circuit Breakers Bays - 10 Nos. (one of the feeder bay can be utilised for station transformers (2X315
243	21 - Technical particulars of 33KV Cubicle GIS.				As per Sr. No. 15, the Control Voltage is 220V DC.	We request you to consider 100 V DC as control voltage.	Control voltage shall be 220 V DC as per standard Practice of OPTCL
244	21 - Technical particulars of 33KV Cubicle GIS.				As per Sr. No. 10.1, 12, 13 the parameters shall be "As per SLD". However we are not able to locate the SLD for 33KV GIS along with the OPTCL Tender specification.	We request you to kindly provide us the SLD for 33KV GIS.	The Single line Diagram for 33KV GIS system is enclosed.
<b>VIJAI ELECTRICALS LIMITED PRE BID CLARIFICATIONS</b>							
245	Clause No.				Description	Clarification required	
246	Volume -IIA, Scope of works, 2.0 Brief scope of work :, serial item (vii)				Approximate Substation area(Land): 7 Acres.	1) Please provide the length. width of the plot area and shape of plot.  2) Please provide the exact location of incoming 220KV lines w.r.t. plot & accordingly outgoing 33KV lines.	The typical indicative layout of the GIS substation & Land layout are enclosed. The location & 220 KV Line w.r.t the plot is indicated in the layout. However the bidder to visit site and ascertain the position.
247	Volume -IIA, Technical specification for design clauses for substations, serial item 6.0				6.0 Earthing system :	Please provide the soil resistivity to be considered for tender purpose since after award of contract exact soil resistivity shall be measured.	In bidders scope.
248	Volume -III , Part -1, Schedule -2A (For Substation), SI.No.10.1				10.1. 220KV XLPE Cable 1000sqmm (1000Amps single core)	220KV and 33KV cable specification is not available with tender specifications.	220 KV XLPE Cable is deleted from the scope.
249	Volume -III, Part -1, Schedule -2A (For Substation), SI.No.1 0.2				10.2. 33KV Cable 630sqmm (800Amps single core)		33KV XLPE cable specification is enclosed.
250	Volume -III, Part -1, Schedule -2A (For Substation), SLNo.8				NCT for Transformer protection rating 36KV, (1200-600-300/1-1A) having two PS CL core (in each I power transformer 1 no. NCT in 220KV side)	1) In Technical Specification, VOL-IIA, Scope of work, Clause NO.2.1.1 Electrical, it is not given. Clarify	As per BPS, Ref Vol-IB-2A & Vol-II-TS-E-12 -Tech spec for CT. NCT's are required for adopting REF protection for Transformers. The NCT shall be in line with the 36 KV class CT for AIS, but with 02 Nos of Cores of PS class.
251	Volume -III, Part -1, Schedule -2A (For Substation), SLNo.9				NCT for Transformer protection rating 36KV, (800-400-200/1-1A) having two PS CL core (in each power transformer 33KV side 1 no.)		As per BPS, Ref Vol-IB-2A & Vol-II-TS-E-12 -Tech spec for CT. NCT's are required for adopting REF protection for Transformers. The NCT shall be in line with the 36 KV class CT for AIS, but with 02 Nos of Cores of PS class.
252	Volume -III, Part -1, Schedule -2A (For Substation)					In Part -1, Schedule -2A (For substation), spikes are not included.	Spikes should be considered for direct lightning strike. The weight of spikes will be covered in the s/s structure. Weight of the structure ref Vol-IB-2A-BPS.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
253	VOLUME-II, technical specification for design clauses for substations, clause.2 para no. 4				Each substation shall be adequately protected against direct lightning strikes, either by the use of spikes or earth wires located on the substation structures, the use of spikes is preferred.		Spikes of 09 mtrs length, 40 mm dia, medium gauge G.I pipes to be fitted on the tower column for direct lightning strike.
254	Volume -III, Part -1, Schedule -2A (For Substation), SLNo.19.1 & 19.2 and 19.3 & 19.4				19.1 Power cables, 1.1 KV, XIPE, Armoured, aluminium conductor (As per specification) 19.2 Control cables, 1.1 KV, PVC, Stranded copper (As per specification)	1) 19.3 is repetition of 19.1. 2) 19.4 is repetition of 19.2. Please clarify.	Bidders to quote against item 19.3 & 19.4 as 19.1 & 19.2 are shaded. Ref Vol-IB-BPS-Sched- 2A-SS,2B-SS & 2C-SS.
255	BIDDING INSTRUCTIONS ( INV & INB) VOLUME I -S.OBIDDER'S QUALIFICATION CRITERIA (BQC)/ QUALIFYING REQUIREMENTS (QR). -(A) TECHNICAL CRITERIA -5.1.1 or 5.1.2				5.1.1 The Bidder should have Designed, Constructed and Commissioned minimum One (01) Number 220 KV or higher voltage class substation having minimum 3 (three) Nos. Bays of 220 KV or higher voltage class on Turn Key basis. (OR) 5.1.2 The Bidder should have Erected (including civil foundation works), constructed, Tested and Commissioned minimum 8 (eight) nos. of 220 KV 0 higher voltage class Bays. The above works ( 5.1.1 or 5.1.2 ) should have been completed during last 10 (ten) years and should be in successful operation for a minimum period of Two (02) years reckoned from the date of opening 0 Techno Commercial Bids. The bidder mayor may not be the manufacturer 0 220kV or above voltage class GIS switchgear/modules. In case the bidder is not the qualified GIS equipment manufacturer, they must obtain authorization(as per format enclosed AnnexureXXVI1i of Vol A), from the manufacturer 0 GIS equipments meeting the under mentioned criteria of (I) to (IV).	Can GIS Equipment Manufacturer give Manufacturers Authorization Letter to more than one (1) bidder -Please Clarify	As per tender Condition Ref Vol-I-INB-CI No.5 As per tender Condition Ref Vol-I-INB-CI No.5 As per tender Condition Ref Vol-I-INB-CI No.5 The GIS manufacturer can submit authorization letter to only one bidder.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
256	BIDDING INSTRUCTIONS ( INV & INB) VOLUME I -6.0	The Bidder shall furnish following documents/details with the Bid in support of: -Point No. 6.1	6.1	Documentary evidence viz. copy of award letter, certificate of performance in support of satisfactory operation, undertaking from the Tower Manufacture regarding access for supply of tower materials, work experience certificate for the Piling Works/ undertaking from expert firm/contractor, who can take up the piling works with relevant documents in support of experience and its capacity & capability on execution of Piling works etc in support of meeting the Technical Criteria of 'OR' as stipulated at 5.0 above Document submitted should be duly flagged/marked in the offer.(This is applicable if there is involvement Of piling work).	Whether Piling Foundation Work Experience is part of the Total Qualification Requirement for this tender. If Yes, whether it is required from the Bidder or their Sub Contractor.	Not Applicable in this GIS Package.	
257	Commercial			-		Whether Deemed Export / Tax exemption benefit are applicable for this particular project . If Yes, Project Authority Certificate ( PAC) will be issued - Please Clarify	As per tender condition.
<b>ALSTOM LIMITED PRE BID COMMENT / PROPOSAL</b>							
258	5.0 BIDDER'S QUALIFICATION CRITERIA (BQC)/ QUALIFYING REQUIREMENTS (QR).			Equipment qualifications: SF6 Gas Insulated Switchgear (III) The 220 KV or above voltage class SF6 Gas Insulated switchgear from GIS supplier/manufacturer must have been supplied to at least Two (02) nos. of GIS substations (with Min 4 bays each substation) in India and the 220kV GIS equipments/bays, must have been operating satisfactory at minimum Two (02) Nos. GIS substations in India and for a minimum period of Two (02) years, as on the date of bid opening.	We would request you to kindly revise the PQ as under enabling us to quote from our Indian GIS unit: Equipment qualifications: SF6 Gas Insulated Switchgear (III) The 220 KV or above voltage class SF6 Gas Insulated switchgear from GIS supplier/manufacturer must have been supplied to at least one (01) no. of GIS substations (with Min 4 bays each substation) in India and the 220kV or above GIS equipments/bays, must have been operating satisfactory at minimum one (01) Nos. GIS substations in India and for a minimum period of one (01) years, as on the date of bid opening.	It is clarified that performance of the GIS equipments will be considered from the same manufacturing unit from where the GIS equipments are offered. <b>QR revised as below:-</b> <b>Equipment qualifications:</b> SF6 Gas Insulated Switchgear (III) The 220 KV or above voltage class SF6 Gas Insulated switchgear from GIS supplier/manufacturer must have been supplied to at least <b>ONE (01) no.</b> of GIS sub stations ( <b>with Min 4 bays in substation</b> ) in <b>India</b> and must have been operating satisfactory of the said GIS substations for a minimum period of <b>ONE (01) year</b> ., as on the date of bid opening.	
259	SCC Clause No.8.0			TERMS OF PAYMENT			
260	8.4			All advance payment made shall be recovered proportionately from each running bill of the contractor.	ALSTOM request OPTCL to allow 'Interest-Free' advance payments for Supply & Erection payments		The mobilisation advance shall be interest bearing @ 10% per anum.
261	SCC Clause No.20.1			The period of latent defect warranty in terms of clause 15.0, Section GCC, Volume shall be limited to 10 years from the date of expiry of Guarantee Period.	The period of latent defect warranty in terms of clause 15.0, Section GCC, Volume- I shall be limited to five (5) years from the date of expiry of Guarantee Period.		Ref Vol-IA-Condn of contract-SCC-CI No.20. All conditions stipulated in SCC shall supplement the GCC,ECC etc.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
262	GCC Clause No.15.3				If any defects are not remedied within a reasonable time, the Engineer may proceed to do the work at the Contractor's risk and cost but without prejudice to any other rights which the employer may have against the Contractor in respect of such defects.	.If any defects are not remedied within a reasonable time, the Engineer may proceed to do the work at the Contractor's cost but without prejudice to any other rights, which the Employer may have against the Contractor in respect of such defects."	As per tender condition.
263	GCC Clause No.20.0				LIMITATION OF LIABILITIES	ALSTOM request OPTCL to include following clause - "Notwithstanding anything to the contrary, Supplier shall not in any circumstances under any legal theory, whether based on contract, warranty, tort (including negligence), strict liability, indemnity, professional liability or otherwise, be liable to indemnify the loss of use, loss of production, loss of profits, loss of contracts, loss of data, cost of capital, replacement power, claims of customer's customers, or any other financial or economic loss or any special, incidental , punitive, indirect or consequential loss or damage whatsoever whether suffered by Purchaser or by any third party and in no case the aggregate liability under the contract shall exceed the price of the contract."	As per tender condition. Ref Cl No. 20 of GCC-Vol-IA-Condition of contract.
264	GCC Clause No.43.0				SUSPENSION OF WORK	ALSTOM request OPTCL to include following clause - "Suspension rights of the Contractor : If the Employer has failed to pay any sum due under the Contract within the specified period, or failed to approve any invoice or supporting documents, or commits a substantial breach of the Contract, then the Contractor may suspend the performance of all or any of its obligations under the Contract, or reduce the rate of progress. The Time for Completion shall be extended and any and all additional costs or expenses incurred by the Contractor as a result of such suspension or reduction shall be paid by the Employer in addition to the Contract Price, except in the case of Suspension order or reduction by reason of the Contractor's default or breach of the Contract."	As per tender condition. Ref Cl No. 43 of GCC-Vol-IA-Condition of contract.
265	GCC Clause No.44.1				CONTRACTOR'S DEFAULT	ALSTOM request OPTCL to delete following clauses / lines - ".....Such payment of excess amount shall be independent of the liquidated damages for delay, which the Contractor shall have to pay if the completion of works is delayed." - To be deleted.	As per tender condition. Ref Cl No. 44 of GCC-Vol-IA-Condition of contract.
266	GCC Clause No.49.1.2				The arbitration shall be conducted in accordance with the provisions of the Indian Arbitration Act, 1940 or any statutory modification thereof. The venue of arbitration shall be Bhubaneswar.	The arbitration shall be conducted in accordance with the Arbitration and Conciliation Act, 1996 or any statutory modification thereof.	<b>Yes, The arbitration shall be conducted in accordance with the Arbitration and Conciliation Act, 1996 or any statutory modification thereof.</b>
267	ECC Clause No.29.0				... Such unfavourable construction conditions will in no way relieve the Contractor of his responsibility to perform the Works as per the schedule.	Extension of time ought to be given to the Contractor.	As per tender condition. Ref Cl No. 29 of ECC-Vol-IA-Condition of contract.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
268	Scope Details Volume -IIA			14.	Approved Make Of Equipment & Materials to be used in the Substation and Transmission lines.	ALSTOM request OPTCL to include names of following additional vendors in the approved make list -	To be finalised during detailed Engineering & subject to approval in vendor approval committee of OPTCL.
269						EPBX - M/s Matrix Telecom Pvt. Ltd. Station Transformers - M/s MARSONS Ltd. Kolkata 132 kV Grade Cable - M/s LS Cable & System Ltd, India, M/s RPG Cables 132 kV Grade Cable Termination Kits - M/s Pfisterer, M/s TYCO, M/s LS Cable & Systems Ltd. TOWER & STRUCTURES FOR LINE AND SUBSTATION AND FOUNDATION BOLT (SAIL/TATA/RINL STEEL TO BE USED) - M/s RATAN Engineering, Kolkata, M/s JINDAL Steel, Kolkata PLANTE BATTERY & BATTERY CHARGER - M/s HBL Power Systems Ltd.	To be finalised during detailed Engineering & subject to approval in vendor approval committee of OPTCL.
270	General				Layout Drawing attached with the tender specification.	Instead of providing 3 separate buildings for 220 kV GIS, 33 kV GIS and Control Room as shown in Layout and given in technical specification, we are proposing a single building for accommodating the 220 kV GIS, 33 kV GIS and Control Room as per Layout Plan (DRG No: PEI-TK7601-12-22-OPT-LAY-001, Rev-0) which will facilitate operational convenience.	Proposed to have two nos building. (1) 220 KV GIS Building shall be of size 25.5 mtrsX 11 mtrs & height approx 10 mtrs, sizes shall be Column centre to centre (However the bidder to design the same considering the safety of the building and 220 KV GIS system). (2) 33 KV GIS Cum Control room building (GF:14.5 mtrsX25mtrs & same area in FF, & height of each floor shall be appro 5 mtrs ,sizes shall be Column centre to centre. Accordingly revised BPS for the same is
271	General					Please provide the SLD for the 33 kV GIS.	The Single line Diagram for 33KV GIS system is enclosed.
272	Clause No: 7				Technical Specification- Vol-II (Part-I)	We have not considered any line trap in our scope of supply, since the same is not specified in the BPS Schedule-2A-Part 1-SS.	No wave trap is required.
273	General					The outdoor lighting fixtures for the switch yard shall be mounted on the switch yard gantries. Please confirm.	Yes. And at the convenient place of the sub-station yard.
274	General					Please provide the core wise details for the 220 kV and 33 kV Current Transformer.	The details of the CT are mentioned in the technical specification. Ref Vol-II-TS-E-12 & also E-30 for GIS Tech spec.
275	General					No bus duct for the 220 kV GIS is envisaged in our scope. We have considered 220 kV XLPE cable for the GIS system.	GIS Bus Duct to be considered as the 220 KV XLPE Cable is deleted from the scope.
276	General					We have not considered transmission line side insulator, hardware, conductor in our scope of work	The scope shall be in line with the OPTCL. Line side insulators & hardwares to be considered in Transmission line. Ref: BPS:2A-Line.
277	220 KV GIS						
278	SLD given(Vol III,Drg,Infocity.pdf,pg 18), BPS,1.2		II,Part		VT,SA for 220kV Incoming line-1,2	As per given SLD mentioned VT,SA for 220kV Incoming line-1,2 however given BPS not mentioned the same. Please clarify VT,SA for incoming line-1,2 are in GIS scope or excluded from GIS scope.	SA,CVT & 220 KV Isolator are outdoor (AIS) type. VTs are to be installed in the GIS sub-station. All the equipment & materials except Power Transformers & RTU (owner supply item) are in the bidder scope.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
279	SLD given(Vol III,Drg,Infocity.pdf,pg 18), BPS,1.1		II,Part	SA for 220kV Transformer feeder - TR1,2		As per given SLD mentioned SA for 220kV Transformer feeder TR-1,2 however given BPS not mentioned the same. Please clarify SA for Transformer feeder TR-1,2 are in GIS scope or excluded from GIS scope.	As per tender condition. Ref Vol-IB-2A,2B,2C-SS-Bidding proposal sheet. 220 & 33 KV side SA's shall be AIS type and are also in the bidders scope.
280	SLD given, Layout given (Vol II,Part III,Drg,Infocity.pdf,pg 18,19)			220kV Transformer feeder - TR1,2		As per given SLD,we understand 220kV GIS transformer feeder shall be with bus duct,SF6 to oil termination. Please clarify	SF6 Gas to Air Bushings for feeder & the transformer feeder can be of porcelain/composite type insulators having type tested.
281	SLD given(Vol III,Drg,Infocity.pdf,pg 18)		II,Part	SLD: 2000A GCB for line/transformer/BC		We offer 2000A,40kA,3sec rated GIS CB instead of GCB.	GCB stands for Gas Circuit Breaker rating is 3150 Amp,40 KA for 3 sec. Refer tender specifications. Ref Vol-II-TS-E-30 for GIS specification.
282	Scope of work, 1,pg 1/34 3.2.14 a) pg 29 of 65			Training: Training in maintenance for the Engineers from OPTCL for 4 weeks at manufactures site. Training in operation for the Engineers from OPTCL for 4 weeks at site.		We provide our standard training programme which consists of the duration of 5 days with max 8 persons with one trainer at factory & site.	1) 10 Nos. Engineers of OPTCL will be given GIS Training for 15 days. (2) If the training is to be given outside India, to & fro, first reaching the country (outside India) & from Outside India to India, shall be borne by OPTCL & all other expenses shall be borne by the Agency.(3) If the training is given inside India the to and fro and lodging expenses shall be borne by OPTCL and all other expenses shall be borne by the Agency.
283	1,pg 6 of 65,			The Bus of the 220 KV & 33 KV GIS System shall be of copper of adequate size and should be capable of with standing the short circuit current level of 40 KA & 31.5 KA respectively for 3 sec.		We shall have aluminium bus for proposed 220kV GIS. Please confirm	<b>The Bus bar conductors made of Aluminium having type tested with short circuit current rating 40 KA for 3 sec. 220kV GIS is with Aluminium Bus bars of rated current rating 2000 Amp at 50 deg centigrade and should have been type tested for short circuit current of 40kA for 3 sec. 33 KV MAIN BUS Current Rating: 2000 Amp (short ckt current 25 KA for 3 sec) &amp; 33 KV RESERVE/TRANSFER BUS Current Rating: 1250 Amp (short ckt current 25 KA for 3 sec).</b>
284	3.1.2,pg 10 of 65			Conductors shall be made of copper suitable for the specified voltage and current ratings		We shall have aluminium conductor for proposed 220kV GIS. Please confirm	<b>-DO-</b>
285	3.1.4,pg 10 of 65			Maximum water content of SF6 gas in GIS, within guarantee period: CB ≤ 150 PPM (volume) Others ≤ 500 PPM (volume)		We confirm the water content of SF6 gas shall be as per IEC 60376	SF6 gas itself inside the cylinder, shall be in line with IEC 60376.SF6 gas inside the GIS equipment,OPTCL specifications shall be followed (ref Vol-II-TS-E-30-GIS spec).
286	3.1.18,pg 13 of 65			FUTURE EXTENSION For any type of bus bar configuration, it shall be possible to extend the switchgear by adding future feeders as decided by the owner with at least one		We have noted and request you to confirm after the extension while conducting the Power frequency test also one bus bar is required to be in service.	HV test for extension bay shall be carried out before the carrying out bus bar coupling activities with the existing bays. During HV test condition of the extension bay both the existing bus bars shall be in service.

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287	3.2.2,pg 19 of 65 3.2.3,pg 20 of 65				Dis connectors shall be three pole,group operated,with one motor operated per three-pole.	Proposed disconnecter/disconnector with combined earth switch shall be single pole,group operated with one motor operating mechanism per three pole. Please confirm.	Three poles of disconnecter/disconnector with earthing switch shall be operated commonly with one motor operating mechanism as per OPTCL tender specification.
288	3.2.6,4 pg 24 of 65				Each current transformer shall be equipped with a marshalling box with terminals for the secondary	Terminal box will be provided for each 220kV GIS - CT. No marshalling box in GIS manufacturer's scope of supply.	CT Terminal/Marshaling box to be provided.
289	3.2.7,5,pg 25 of 65				Potential transformer's secondary shall be protected by fuses for all the windings.	VT secondary shall be protected by MCB	MCB are also acceptable.
290	3.2.8,pg 26 of 65				Surge Arrester	Excluded from GIS manufacturer's scope. Please confirm.	In bidders scope of supply and erection.
291	3.2.11,pg 28 of 65				Local Control Cubicle: - discrepancy type control switches for breaker, disconnecter and earthing switch	We offer spring return type on/off selector switch for breaker,disconnecter and earth switch	Noted, however details shall be discussed & finalized during engineering stage.
292	3.2.20,(b) pg 33 of 65 3.2.23 pg 36 of 65				220kV SF6 Test bushing  Bushing for cable testing	As per given SLD, 220kV GIS test bushing is not required. Please clarify.	Revised SLD is enclosed. No feeder with cable is provided, therefore no test bushing for power cable is required. For GIS HV test will be carried out through SF6 gas to Air bushing of OHL incoming bay.
293	3.2.22, 4) pg 35 of 65				Power frequency tests for the completed GIS at site shall be possible without removing the voltage transformers. The power frequency test voltage at site shall be 80% of the factory test voltage for 1 min at 100Hz.	We confirm that Power frequency tests on site shall be 50 Hz A.C. voltage for 1 min for the completed GIS at site shall be provided without removing the voltage transformers.	Noted, however VT shall be isolated with isolating device during HV test.
294	3.2.24 3,7,11,13,15 pg 36,37 of 65 & BPS schedule - 3				Enclosure insulators and main circuit of bus bar - 1Set Oil pressure switch - 2 Sets Hydraulic Pump/spring charge motor for circuit breakers - 1unit Motor for disconnect switches and grounding switches 1 unit Motor for fast acting grounding switches 1 unit	These spares are mentioned in specification however the same are not mentioned in BPS schedule - 3. Please clarify the requirement.	These spares are included in the Mandatory spare supply schedule 3. The revised BPS schedules are attached.
295					33 kV GIS Single Line Diagram	ALSTOM request OPTCL to provide SLD of 33 kV GIS	The Single line Diagram for 33KV GIS system is enclosed.

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296	TS - 5.2				It shall be possible to interchange various cubicles.	According to IEC 60694 / EN 60694 Temperature of ambient air: Maximum value : 40 °C Average value over 24 hours 35 °C Minimum value "indoor" - 5 °C The maximum temperature inside the room might reach 50 deg however the average temp for 24 hrs for the day will always be 40 deg or below. The switchgear can carry 2000A/1250A continuously on bus bars for a short time period (less than 8 Hrs). Request you to accept the reference temperature for electrical design as per IEC 60694.	Please comply to OPTCL specification Vol-II-TS-E-30 -GIS Spec as per clause 5.2.
297						GIS is fixed type design enclosed inside the gas and therefore interchangeability is not applicable.	Yes.
298	TS - 5.3				Local Control Cubicle:	BCU and Meters shall be fitted in RCP and not in GIS. 33 kV RCP instead of LCC.	To be fitted in LCC.
299	TS - 7.0 f				SF6 gas sufficient for the entire switchgear including loss during installation + 10% extra SF6 gas	Gas Handling is not applicable in our GIS Panel and hence 10% extra GIS requirement need to be clarified.	10% extra SF6 gas is to be considered in line with OPTCL requirement.
300	TS - 7.0 g				Dummy panels wherever necessary.	Please clarify the requirement of Dummy panels	Wherever required to meet OPTCL's requirement.
301	TS - 7.0 h				DISCONNECT SWITCHES (ISOLATORS) AND EARTH SWITCHES	3 position Isolator shall be provided in Bus Side. Line Side Isolator shall not be applicable for Indoor GIS.	Noted.
302	TS - 8.2				All control equipment shall be suitable for operating in an ambient temperature varying between +10 deg. C and +40 deg.C.	Ambient shall be 40 Deg C in line with this clause.	Ambient shall be 50 Deg C.
303					All live parts shall be provided with at least phase to phase and phase to earth clearance in air of 25 mm and 20 mm respectively.	All Live parts are within SF6 gas and hermetically sealed for life time. Same has been power frequency and impulse tested. Therefore any specific clearance in line with this clause is not applicable.	Noted.



SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
304	5.0	BIDDER'S QUALIFICATION CRITERIA (BQC)/ QUALIFYING REQUIREMENTS (QR).			Equipment qualifications: SF6 Gas Insulated Switchgear (III) The 220 KV or above voltage class SF6 Gas Insulated switchgear from GIS supplier/manufacturer must have been supplied to at least Two (02) nos. of GIS substations (with Min 4 bays each substation) in India and the 220kV GIS equipments/bays, must have been operating satisfactory at minimum Two (02) Nos. GIS substations in India and for a minimum period of Two (02) years, as on the date of bid opening.	As per equipment spec clause (iii), supply experience is asked for 220KV or above voltage class. Hence satisfactory operation requirement must be for 220KV or above. In line no 3 of clause (iii), 220KV to be replaced by 220KV or above.	It is clarified that performance of the GIS equipments will be considered from the same manufacturing unit from where the GIS equipments are offered. <b>QR revised as below:-</b> <b>Equipment qualifications:</b> SF6 Gas Insulated Switchgear (III) The 220 KV or above voltage class SF6 Gas Insulated switchgear from GIS supplier/manufacturer must have been supplied to at least <b>ONE (01) no.</b> of GIS sub stations ( <b>with Min 4 bays in substation</b> ) in <b>India</b> and must have been operating satisfactory of the said GIS substations for a minimum period of <b>ONE (01) year.,</b> as on the date of bid opening.
305	Notice Inviting Tender				Last date & time of receipt of bid.	We request you to extend the due date of submission of bid for another 4 (four) weeks ie. 17/10/2012	
<b>CGL PRE BID COMMENT / PROPOSAL</b>							
306	AS Per TS GIS systemE30, Pg 6 of 65				33kv Level Short Circuit Current level is 31.5kA for 3Sec., However as Per BPS it shows 25kA for 3 sec	Please Clarify the same	25 KA for 3 Sec
307						As Per SLD 216kV LA are Shown as a Part of GIS, However as Per TS & BPS it is at AIS Side. Please Carify the same	SA,CVT & 220 KV Isolator are outdoor (AIS) type. VTs are to be installed in the GIS sub-station. All the equipment & materials except Power Transformers & RTU (owner supply item) are in the bidder scope. Revised BPS schedules are enclosed.
308						Please clarify the scope at 33kV Side related to O/G circuit	In the BPS, the Feeders quantity shall be considered as under: 1. Item no. 2.1 – 33 KV Transformer feeders - 2 Nos. 2. Item no. 2.2 - 33 KV Feeders - 7 Nos. 3. Item no. 2.4 - 33 KV Bus Coupler - 1 No. 4. Item No. 2.5 - 33 KV Station Transformer feeder stands deleted.Total No. of Circuit Breakers Bays - 10 Nos. (one of the feeder bay can be utilised for station transformers (2X315
309						Please clarify the earthing material inside the GIS Building	75 mm X 10 mm GI flat
310	Vol. II(TS) E5-Design Substation, Pg 9/9				As Per TS GI Flat for equipment earthing is 75X10mm, However as Per BPS Cl. 12.2 50 x 6 mm GI Flat for equipment/ strucutre earthing.	Please Clarify your final requirement.	The laying of buried earth mat is 75mmX10mm & the equipment raiser shall be 50mmX6mm.
311	Electrical S/S BPS- Sr. No. 1.2				AS Per BPS in 220kV Line feeder bay VT is not Shown	As Per 220kV SLD there is VT in Line Feeder Bay. Please specify that whether VT Is present in Line feeder bay or not.	CVT in line feeder bay as outdoor equipment for 220 KV side.

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312						Please clarify the number of Line feeder bay & Station Trafo feeder bay in 33kV Side. Also Provide the Schematic line SLD For 33kV Side.	In the BPS, the Feeders quantity shall be considered as under: 1. Item no. 2.1 – 33 KV Transformer feeders - 2 Nos. 2. Item no. 2.2 - 33 KV Feeders - 7 Nos. 3. Item no. 2.4 - 33 KV Bus Coupler - 1 No. 4. Item No. 2.5 - 33 KV Station Transformer feeder stands deleted.Total No. of Circuit Breakers Bays - 10 Nos. (one of the feeder bay can be utilised for station transformers (2X315
313						Please Clarify the Connection medium (GIS DUCT / CABLE) between the 220kV GIS & its O/G line.,& for transformer feeder also. Whether the same is done by Busduct or via HT Cable. Same in case 33kV Side Also. IF yes then Please provide the BUSDUCT Specification.	All the Incomer feeders of 220 KV shall be with Gas Insulated Bus duct with termination of SF6 Gas to Air Bushings and the transformer feeders shall be with Gas Insulated Bus duct with termination of SF6 Gas to Air Bushings. For 33 KV side it shall be done via 33 KV XLPE cable.
314						For 40MVA Transformer HV & LV side, Is there any requirement of spare run of cable or not? Please confirm.	One run spare cable required for 33 KV side for each transformer.
315						As Per TS, Disc insulators are used for suspension & tension. However, Longrod Polymer Insulators can also be used in line with PGCIL / Other SEB's ongoing practice . Please confirm your requirement.	Disc porcelain insulators are to be used.
316						Please clarify the type of cable tray whether it is Perforated type or Ladder type.	Bidder may consider perforated type GI cable tray.
317	Schedule-2A-SS, BPS Sr. no. 19.1 to 19.4					Please clarify that Power & control cable is L.S. Qty. or it is under unit rate qty. IF unit rate then mention the qty.	As per BPS, Ref Vol-IB-2A. It is in LS basis.
318						We Understood that Scope of OPGW cable , is from the LILO Point to new switch yard only. Please confirm the requirement.	Yes.
319	Schedule-2A-SS, BPS Sr. no. 22.4					Please mention the length of approach road for street lighting.	In bidders scope. However can be ascertained from the typical indicative layout.
320	Schedule-2A-SS, BPS Sr. no. 24.2			Control & Protection of 33kV Feeders		As Per BPS there is separate control & Protection panels for 33kV Feeders. However the same can be integral part of 33kV Switchboard. Please Look into the same & confirm your requirement.	Combined Bay control cum protection IEDs for 33kV meeting the specification requirement also acceptable.
321	Schedule-2A-SS, BPS Sr. no. 27					Please mention the frequency range for walkie talkie. We assume that necessary approval from other authorities is not in the Bidders Scope.	As per tender specification. To be decided during detailed Engineering.
322						There is a contradiction in the conductor between the Electrical BPS of S/S (which asks for MOOSE conductor) & TL (which ask for ZEBRA Conductor) . Please Clarify that which type of conductor is used and where. Kindly also Clarify whether it is Single, Double or Some other combination.	ACSR Zebra conductor for the proposed Transmission line. ACSR Moose conductor for the proposed GIS sub-station.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
323						Please Provide the dimensions of Buildings, Switch yard fencing area. Or provide us a Layout in which all dimensions are mentioned.	Proposed to have two nos building. (1) 220 KV GIS Building shall be of size 25.5 mtrsX 11 mtrs & height approx 10 mtrs, sizes shall be Column centre to centre (However the bidder to design the same considering the safety of the building and 220 KV GIS system). (2) 33 KV GIS Cum Control room building (GF:14.5 mtrsX25mtrs & same area in FF, & height of each floor shall be appro 5 mtrs ,sizes shall be Column centre to centre. Accordingly revised BPS for the same is
324						Please provide the drawings of GIS Building 220kV as well as 33kV	Size of the buildings are given. Bidder to design and furnish the drawing for approval of OPTCL at the time of detailed Engineering.
325						Please Provide the Soil Bearing Capacity, & Soil resistivity data.	In bidders scope.
326						Please Provide the cable trench section view drawings as different sections are preferred in the BPS.	The size of the cable trenches section wise are indicated and may be refereed Bidders to design as per the data given in Vol-II-TS-E-6 civil works , CI No. 12.8.
327						Please provide the Civil Arch Drawings of D & E type Quarter, Store room, Control room, Security cum Guest room.	D type= 120 sqm & E Type=73 Sqm.Tidders to design as per the data given in Vol-II-TS-E-6 civil works. In bidders scope.
328	VOL-II TS, E-24-Substation Lighting-Page5of 10					As Per Spec For AC Emergency Lighting DG is used. However as Per BPS there is no such item. Please look the same & confirm your requirement.	D.G is not included in the present scope of GIS S/S.
329	VOL-II TS, E-24-Substation Lighting-Page5of 10					As Per normal practice, Lighting in Switch yard area is done by Flood light (HPSV /MH) Lamp. However, your specification ask for LED lamp for switch yard illumination. Please look into it & confirm your requirement.	1) As per the indicative layout given along with the tender document. 2) As per tender specification. Conventional fittings will be considered if LED fittings are not available at the time of installation.
330	Schedule-2C-SS, BPS Sr. no. 1.1 to 1.2.11			Civil Works		For the work mentioned in Sl. No. 1.1 to 1.2.11 will be on L.S. basis or unit rate basis. Please Clarify the same.	Sl. No. 1.1 to 1.2.11 are shaded in the BPS. Bidder to quote against items 1.3.1,1.3.2,1.3.3,1.3.4,1.4 & 1.5 . Refer the BPS 2C-SS, which are unit rate basis.
331	Schedule-2C-SS, BPS Sr. no. 1.1.1 & 1.1.2			Civil Works		Please provide the Civil drawings of RP1 & RP2. As mentioned in your BPS	To be designed by the bidder after soil investigation. Can be finalised during detailed Engineering.
332	Standard Structural Drawing					Please provide us the OPTCL's standard transmission line tower & switch yard Tower and Beam drawing. It will enable us to offer you the optimised price.	Can be finalised during the detailed Engineering.
333	Standard Foundation Drawing			Civil Works		Please provide us the OPTCL's standard transmission line tower Foundation & switch yard Tower Foundation drawing. It will enable us to offer you the optimised price.	To be designed by the bidder after soil investigation. Can be finalised during detailed Engineering.
334	Volume IB				BPS,PART I, SCHEDULE 2C (FOR SUBSTATION),(Equipment/Materials F&I Price against Package GIS INFOCITY II) and PART II, SCHEDULE 2C (FOR LINE) (Equipment/Materials F&I Price against Package	We understand that the description of the referred Schedule should be <b>ETC &amp; Civil Price against Package GIS INFOCITY II for SS and Line respectively.</b> Please confirm our understanding.	Yes. Revised BPS schedules are enclosed.

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
335	Volume I, Bidding Instructions <b>Clause 5, Para [B]: 220 kV Transmission Line Work</b>				Qualification for 220 kV Transmission Line Work, Clause 5.1.3, 5.1.4 and Joint Venture Clause 5.2.1	<p>We would like to state that the quantum of work for Transmission Line is very less as compared to Substation and also it is not attractive to the Transmission Line contractors to go for joint venture with Substation Contractors. Further note that many of the main Substation Contractors do not have Transmission Line qualification. Therefore, we hereby request you to remove the Transmission Line qualification as mentioned in referred clauses.</p> <p>This request is made to enable broader &amp; healthy competition in bidding and monetary benefits in the favour of OPTCL.</p> <p>However, we will submit the required Undertaking from the tower manufacturer along with our bid and at the event of award of contract on us, we will depute Transmission Line Contractor after your satisfaction and final approval.</p>	<p>Bidder's Qualification Criteria (BQC)/ Qualifying Requirements(QR) shall be in line with OPTCL tender specifications. Refer Bidder's Qualification Criteria- Vol-I-Inst to Bider Cl. 5-</p> <p>(1)<b>FOR GIS SS:-</b> It is clarified that performance of the GIS equipments will be considered from the same manufacturing unit from where the GIS equipments are offered. <b>QR revised as below:- Equipment qualifications:</b> SF6 Gas Insulated Switchgear (III) The 220 KV or above voltage class SF6 Gas Insulated switchgear from GIS supplier/manufacturer must have been supplied to at least <b>ONE (01) no.. of GIS sub stations (with Min 4 bays in substation) in India</b> and must have been operating satisfactory of the said GIS substations for a minimum period of <b>ONE (01) year</b>, as on the date of bid opening.</p> <p>(2) FOR TRANSMISSION LINE:- <b>OR</b></p> <p>The Bidder who meets the QR as indicated in Cl. No. 5(PARA-A)-Vol-I and does not meet the QR as indicated in Cl. No.5(PARA-B) above, can participate in the tender, provided they submit the following undertaking in the Non-Judiciary stamp paper(worth Rs.100/-).</p> <p>We M/S----- do hereby undertake that, if the contract (Sr. G.M-CPC-Tender-GIS Infocity-II-Package-23/2012-13) is awarded to us we will purchase the tower structural &amp; the line materials from the OPTCL approved vendor &amp; Erection of the said materials will be carried out through the approved Rate Contract holder of OPTCL".</p> <p><b>* NAME OF THE RATE CONTRACT HOLDERS OF OPTCL</b></p> <p><b>The Bus bar conductors made of Aluminium having type tested with short circuit current rating 40 KA for 3 sec. 220kV GIS is with Aluminium Bus bars of rated current rating 2000 Amp at 50 deg centigrade and should have been type tested for short circuit current of 40kA for 3 sec. 33 KV MAIN BUS Current Rating: 2000 Amp (short ckt current 25 KA for 3 sec) &amp; 33 KV RESERVE/TRANSFER BUS Current Rating: 1250 Amp (short ckt current 25 KA for 3 sec).</b></p>
336	Vol II (TS) Technical Specification For 220/33 KV Gas Insulated Switchgear (GIS)				GENERAL SPECIFICATION The Bus of the 220 KV & 33 KV GIS System shall be of copper of adequate size and should be capable of with standing the short circuit current level of 40 KA & 31.5 KA respectively for 3 sec.	<p>We wish to state that Aluminium bus bar is mainly used in India for GIS in all leading utilities like PGCIL, RVPNL, KPTCL, TNEB,WBSETCL, HVPNL,PTCUL &amp; DTL etc. Also the majority of the GIS manufacturers can supply GIS with Aluminium bus only which is fully type tested as per the IEC requirements and can meet your tender specifications. Therefore, we request OPTCL to amend this clause and allow us to supply GIS with Aluminium bus bar also.</p> <p>This request is made also to benefit OPTCL in monetary terms without compromising the quality.</p>	<p><b>The Bus bar conductors made of Aluminium having type tested with short circuit current rating 40 KA for 3 sec. 220kV GIS is with Aluminium Bus bars of rated current rating 2000 Amp at 50 deg centigrade and should have been type tested for short circuit current of 40kA for 3 sec. 33 KV MAIN BUS Current Rating: 2000 Amp (short ckt current 25 KA for 3 sec) &amp; 33 KV RESERVE/TRANSFER BUS Current Rating: 1250 Amp (short ckt current 25 KA for 3 sec).</b></p>

SL. NO.	VOLUME	SECTION	CLAUSE NO	PAGE NO	DESCRIPTION	DETAIL OBSERVATION/QUERY OF DIFFERENT BIDDERS	OPTCL REPLY
337	Vol II (TS) Technical Specification For 220/33 KV Gas Insulated Switchgear (GIS)				Cl. 3.1.2 CONDUCTOR TYPE AND CONTACTS Conductors shall be made of copper suitable for the specified voltage and current ratings.		