

Madhya Pradesh Metro Rail Corporation Limited (MPMRCL)

(A Joint Venture of Government of India and Government of Madhya Pradesh)

CIN: U75100MP2015SGC034434

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Clarifications - 01

No.: 0026/MPMRCL/2022 Date: 10.01.2022

With reference to Tender Notification No.: 1458/MPMRCL/2021/Package IN–09, Date: 10.11.2021, regarding "Engineering, Supply, Erection, Testing and Commissioning of Power Supply Receiving Sub–Station (RSS), Traction Sub-Station (TSS), Auxiliary Sub-Station (ASS), 750 V DC 3rd Rail and SCADA System" for Indore Metro Rail Project, following corrigendum are issued in pursuant to clause 3.5 of Volume I – ITT. The corrigendum will be part of the said tender document.

Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
1.	Volume I – NIT, ITT, EQC and LOT	Part - 1 (NIT), Sub- Clause 1.2: key Details,	Time & date of submission of Tender online Start: 11:00 hrs. on 29.12.2021	3 3	Corrigendum-01 issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		Page (8/ 132)	End: 16:00 hrs. on 05.01.2022	on cost & technical aspect of proposed solution, which needs a considerable time. Also, as per tender timeline indicated in tender document for issuance of addendum/corrigendum is 22nd December 2021, during which there will be starting of holiday in European region, where most of major DC System suppliers are located, thus we would not able to receive the best and compliant offer for the project. In this regard, we sincerely request MPMRCL to extend the Tender submission deadline by a period of at least 6-8 weeks from date of current submission date i.e. 05th January 2022.	
2.	Volume I – NIT, ITT, EQC and LOT	Part - 2 (ITT) Sub-Clause 4.2.6.1, Page (24/ 132)	The Tenderer shall be solely responsible to find out and ascertain whether the Works or any part thereof will qualify and be eligible for the concessional duty benefits under Chapter 98.01 of Custom Tariff Act for	1)1Kindly inform the procedure of reimbursement of custom duty. 2)1Kindly confirm, whether the duty benefits are available on the import of plant and machinery for use in the	The Contractor need to process for Project Import benefits and the Employer will facilitate with recommendations and sponsorship letter.



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			project Imports. The Tenderer shall also ascertain the applicability of Custom Duty and any other taxes, duties cess, etc. and inclusion of the same in their quoted price. After award of the Contract, the Employer at the written request of a Contractor shall facilitate for obtaining sponsoring/ recommendation letter from the Ministry of Housing & Urban Affairs (MoHUA), Gol for getting themselves registered for availing Project Import benefits. However, the responsibility to avail the concessional benefits under Project Import or otherwise as extended in accordance with the law of the land shall solely rest with the Contractor. The coordinating officer for the said purpose in the Employer's office shall be "Director (Technical), Madhya Pradesh Metro Rail Corporation Limited, 2nd Floor, Smart City Development Corporation Limited Office Building, Kalibadi Road, BHEL, Sector A, Berkheda, Bhopal – 462022, Madhya	3)1Kindly specify the notification through which custom duty exemption shall be available. Kindly elaborate the procedure for availing such benefit. 4)1We understand that issuance of the Project Authority Certificate shall be the responsibility of the employer. Such PAC shall be issued separately in the name of each partner, vendor. Contractor shall be responsible post issuance of PAC. Kindly confirm our understanding	The Tender Conditions shall prevail.



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			Pradesh, India".		
3.	Volume I – NIT, ITT, EQC and LOT	Part - 2 (ITT) Sub-Clause 4.2.6: Tenderers must note the following, Sub Clause 4.2.6.2 Page (24 /132)	Tenderers are advised to quote the price inclusive of all central, state, local taxes, duties, levies, cess, GST and all other incidental charges required to fulfil the tender conditions including statutory deduction viz., TDS towards Income Tax, GST, Labor cess etc., after considering clause 4.2.4, 4.2.5, 4.2.6 above.	Please clarify following points 1. In case if the scope of one of the consortium member is not Rolling Stock Supply or works contract then output GST applicable to goods, component, spares or services (as per scope of consortium member) as applicable to HS Code / Service Accounting Code is excluded will be reimbursed by the Employer as per HS Code / Service Accounting Code. 2. In case of offshore supplies by foreign consortium member — (a) Employer will be importer on records and employer's IEC will be used for customs clearance. (b) The Customs Duty, Cess, Surcharge & GST paid on such imports (in the name of Employer) will be paid by Employer. 3. In case of offshore services by foreign consortium member, GST	This pertains to Rolling Stock Tender. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				under reverse charge for imports of such services will be paid by employer.	
4.	Volume I – NIT, ITT, EQC and LOT,	•	Tenderers are advised to quote the price inclusive of all central, state, local taxes, duties, levies, cess, GST and all other incidental charges required to fulfil the tender conditions including statutory deduction viz., TDS towards Income Tax, GST, Labour cess etc., after considering clause 4.2.4, 4.2.5, 4.2.6 above.	Bidder understanding BOCW Cess 1% is applicable on total contract price. Please confirm	"Pursuant to the Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996, the Contractor shall be liable for BOCW Cess, its applicability and the Contract Price shall be deemed inclusive of BOCW Cess. In case the contractor considers that the BOCW Cess shall not be applicable partially or fully (for portions of supply, services and/ or both, as the case may be), then the Employer shall levy and deposit BOCW Cess accordingly, subject to submission of appropriate undertaking/ certificate by the



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					Contractor. The Contractor shall indemnify and hold harmless the Employer against and from all claims arising out of or in this regard." The bidders need to assess the applicability of BOCW for the work. Any liabilities on account of BOCW at any stage shall be on the part of bidder and the quoted price shall be inclusive of BOCW charges. Employer need to
					be indemnified against and from all claims arising out of this. The Tender Conditions shall prevail.
5.	Volume I – NIT, ITT, EQC and	Part -2 (ITT) Sub-Clause 4.2.6: Tenderers	Tenderers are advised to quote the price inclusive of all central, state, local taxes, duties, levies, cess, GST and all other incidental charges required to fulfil	Please clarify following points: 1. In case if the scope of one of the consortium member is not works contract then output GST applicable	The tender condition shall prevail.



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	LOT	must note the following, Sub Clause 4.2.6.2, Page (24/ 132)	the tender conditions including statutory deduction viz., TDS towards Income Tax, GST, Labour cess etc., after considering clause 4.2.4, 4.2.5, 4.2.6 above.	to goods, component, spares or services (as per scope of consortium member) as applicable to HS Code / Service Accounting Code is excluded will be reimbursed by the Employer as per HS Code / Service Accounting Code. 2. In case of offshore supplies by foreign consortium member — (a) Employer will be importer on records and employer's IEC will be used for customs clearance. (b) The Customs Duty, Cess, Surcharge & GST paid on such imports (in the name of Employer) will be paid by contractor in the name of Employer.	2. In case of off-shore supplies and services: (a) The IEC of Employer may be used. (b) The Customs Duty, Cess, Surcharge & GST paid on such imports will be paid by contractor in the name of Employer and such duties, Cess etc. are deemed to be included in the price bid.
				3. In case of offshore services by foreign consortium member, GST under reverse charge for imports of such services will be paid by employer.	3.In case of off-shore services, the Reverse Charge Mechanism for GST will be applied by the Employer. The Tender Conditions shall



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					prevail.
6.	Volume I – NIT, ITT, EQC and LOT,	Part -2 (ITT) Sub-Clause 4.2.4, Page (24 / 132) & Sub Clause 4.2.6.1, Page (24 / 132) & Sub Clause 4.2.6.2, Page (24 / 132)	4.2.4 The Employer may obtain from the Government partial or a complete waiver of taxes, royalties, duties, Labour cess, GST and other levies payable to various authorities. The successful Tenderer (the Contractor) shall maintain meticulous records of all the taxes and duties paid and provide the same with each running bill. 4.2.6.1 The Tenderer shall be solely responsible to find out and ascertain whether the Works or any part thereof will qualify and be eligible for the concessional duty benefits under Chapter 98.01 of Custom Tariff Act for project Imports. The Tenderer shall also ascertain the applicability of Custom Duty and any other taxes, duties cess, etc. and inclusion of the same in their quoted price. After award of the Contract, the Employer at the written request of a Contractor shall facilitate for obtaining sponsoring/	Based on the referred clause, we have the following queries. 1)1We understand that Basic Custom duty including Cess and GST shall not be included in our bid price as per clause 4.2.4 and the same shall not be used for evaluation of bid price. Kindly Confirm. 2)1The Basic Custom Duty and the GST shall be paid extra over and above the quoted bid price at actuals. Kindly confirm. 3)1Whether Excise duty & VAT paid on petroleum products, be reimbursed or shall it be included in the cost. If it shall be included in cost, will client reimburse the variation on account of rates of excise duty and VAT? Kindly clarify. 4)1Whether client will reimburse the extra tax which shall not be utilised against output tax paid on purchase	The Tender Conditions shall prevail.



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			recommendation letter from the Ministry of Housing & Urban Affairs (MoHUA), Gol for getting themselves registered for availing Project Import benefits. However, the responsibility to avail the concessional benefits under Project Import or otherwise as extended in accordance with the law of the land shall solely rest with the Contractor. 4.2.6.2 Tenderers are advised to quote the price inclusive of all central, state, local taxes, duties, levies, cess, GST and all other incidental charges required to fulfil the tender Labour cess etc., after considering clause 4.2.4, 4.2.5, 4.2.6 above. The Tenderer's attention is directed to the provisions and requirements of Pricing Document, Volume VII.	input materials Also, whether the tax for which credit is not available? Kindly confirm. 5)1Whether GST TDS certificate will be given by client over and above the contract value or will it be deducted from the Contract Value shall be reimbursable by client. Kindly clarify. 6)1We understand that GST shall be payable on the advance payments received from client. However, there is no mention of GST reimbursement on advance by client. Kindly clarify. Kindly clarify whether GST shall be reimbursed on all input purchases or only on imports of specific items like spares, jigs, fixtures etc.as mentioned in bid documents or shall it be reimbursed on output liabilities only.	
7.	Volume I – NIT, ITT,	Part -2 (ITT), Sub-Clause	4.2.6.1 The Tenderer shall be solely responsible to find out and ascertain	1)1Kindly inform the procedure of reimbursement of custom duty.	The Contractor need to process for project import



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	EQC and LOT,	4.2.6: Tenderers must note the following, Sub Clause 4.2.6.1, Page (24 / 132)	whether the Works or any part thereof will qualify and be eligible for the concessional duty benefits under Chapter 98.01 of Custom Tariff Act for project Imports. The Tenderer shall also ascertain the applicability of Custom Duty and any other taxes, duties cess, etc. and inclusion of the same in their quoted price. After award of the Contract, the Employer at the written request of a Contractor shall facilitate for obtaining sponsoring/ recommendation letter from the Ministry of Housing & Urban Affairs (MoHUA), Gol for getting themselves registered for availing Project Import benefits. However, the responsibility to avail the concessional benefits under Project Import or otherwise as extended in accordance with the law of the land shall solely rest with the Contractor. The coordinating officer for the said purpose in the Employer's office shall be "Director (Technical),	2)1Kindly confirm, whether the duty benefits are available on the import of plant and machinery for use in the project. 3)1Kindly specify the notification through which custom duty exemption shall be available. Kindly elaborate the procedure for availing such benefit. 4)1We understand that issuance of the Project Authority Certificate shall be the responsibility of the employer. Such PAC shall be issued separately in the name of each partner, vendor. Contractor shall be responsible post issuance of PAC. Kindly confirm our understanding	Benefits, the Employer will facilitate with recommendations and sponsorship letter. The Tender Conditions shall prevail.



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			Madhya Pradesh Metro Rail Corporation Limited, 2nd Floor, Smart City Development Corporation Limited Office Building, Kalibadi Road, BHEL, Sector A, Berkheda, Bhopal – 462022, Madhya Pradesh, India".		
8.	NIT, ITT, EQC and LOT & Volume II – Conditions	Part -2 (ITT)Sub- Clause 4.2.6: Sub Clause 4.2.6.2, Page (24/ 132) & GC Sub- Clause 14.1 (b), Page (83/210)	Tenderers are advised to quote the price inclusive of all central, state, local taxes, duties, levies, cess, GST and all other incidental charges required to fulfil the tender conditions including statutory deduction viz., TDS towards Income Tax, GST, Labour cess etc., after considering clause 4.2.4, 4.2.5, 4.2.6 above & "the Contractor shall pay all taxes, duties and fees required to be paid by the Contract runder the Contract, and the Contract Price shall not be adjusted for any of these costs, except as stated	Kindly provide clarity on BOCW cess applicability on tender price. As per our understanding BOCW cess @ 1% only on civil portion of the contract, this in conformity with the Hon'ble Supreme Court judgment, vide SLP (C) No. 8630 of 2020 in the matter of UTTAR PRADESH POWER TRANSMISSION CORPORATION LTD. order dt. 12th May 2021. As per BOCW law in government contract, employer needs to be recover and deposited hence clarity required. In the recent DMRC DE-04 tender, DMRC confirmed 15%	"Pursuant to the Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996, the Contractor shall be liable for BOCW Cess, its applicability and the Contract Price shall be deemed inclusive of BOCW Cess. In case the contractor considers that the BOCW Cess shall not be applicable partially or fully (for portions of supply, services and/ or both, as the case may be), then the Employer shall levy and



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			Changes in Taxes];"	Civil contract and 1% BOCW shall be deducted on the 15% of contract value. Request your acceptance on the same BOCW on the Civil portion of contract.	accordingly, subject to submission of appropriate undertaking/ certificate by the Contractor. The Contractor shall indemnify and hold harmless the Employer against and from all claims arising out of or in this regard." The bidders need to assess the applicability of BOCW for the work. Any liabilities on account of BOCW at any stage shall be on the part of bidder and the quoted price shall be inclusive of BOCW charges. Employer need to be indemnified against and from all claims arising out of this. The Tender Conditions shall prevail.



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9.	Volume I – NIT, ITT, EQC and LOT	PART 2 (ITT) , Sub-clause 4.11.2, Page (26 / 132)	The Contractor under no circumstances shall sublet the entire Works. No more than fifty percent (50%) of the Accepted Contract Amount (excluding the amount for Detailed Design Services and Provisional Sums; if any) shall be subcontracted.	We understand that restriction of 50% sublet is excluding the value of component sourced from external suppliers. Kindly Confirm	The restriction of fifty percent (50%) sub-let excludes the value of component sourced from vendors / suppliers. The Tender Conditions shall prevail.
10.	Volume I – NIT, ITT, EQC and LOT,	Part -2 (ITT), Sub-Clause 4.19: Page (28 /132) Annexure – 3 [As per Sub- clause 4.19.1 of ITT] Form of EMD/ Tender Security Declaration, Page (45 /132)	4.19: Earnest Money Deposit (EMD) / Tender Security Declaration The Tenderer shall submit scanned copy of EMD / Tender Security Declaration in the form given in Annexure – 3 of Instructions to Tenderers with their Tender through online submission.	Kindly confirm the requirement of EMD BG. It is mentioned to submit as per Annexure-3. However, Annexure – 3 [As per clause 4.19.1 of ITT] - Form of EMD/ Tender Security Declaration is an undertaking only. Kindly Confirm that bidder need to submit only undertaking as per the format.	The bidder is required to submit Tender Security Declaration which is an undertaking as per the standard format. The Tender Conditions shall prevail.
11.	Volume I – NIT, ITT,	PART 3: (EQC), Sub	Lead Partner and other Partners in a JV/ Consortium	Request MPMRCL to relax the minimum participation requirement at	Corrigendum is being issued separately.



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	EQC and LOT	Clause 9.2.2, Page (64 / 132)	 a. The lead partner must have a minimum of 40% participation in the JV/ Consortium and the lead partner must have a higher share than all other partners. b. Other Partners must have a minimum of 26% in the JV/ Consortium 	least in case the JV/Consortium members are from same group company. Also, in all the JV/Consortium members as anyway jointly and severely liable for complete contract so we once again to delete the minimum participation percentage requirement.	
12.	Volume I – NIT, ITT, EQC and LOT	Part - 3 (EQC), Sub- Clause 10.2 Work experience Sub clause 10.2.1, Page (66 / 132)	PART 3: ELIGIBILITY CUM QUALIFICATION CRITERIA(EQC) Clause 10.2.1 a. A minimum number of one *"Similar Work" of value INR 413 Cr. that have been satisfactorily and @Substantially completed. OR b. A minimum number of two *"Similar Works" each of value INR 258 Cr. or above, that have been satisfactorily and @Substantially completed. c. A minimum number of three *"Similar Works" each of value INR 206 Cr. or above, that have been satisfactorily and @Substantially completed.	PART 3: ELIGIBILITY CUM QUALIFICATION CRITERIA(EQC) Clause 10.2.1 a. A minimum number of one *"Similar Work" of value INR 413 Cr. that have been satisfactorily and @Substantially-completed. OR b. A minimum number of two *"Similar Works" each of value INR 258 Cr. or above, that have been satisfactorily and @Substantially completed. c. A minimum number of three *"Similar Works" each of value INR 206 Cr. or above, that have been	Corrigendum is being issued separately.



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			* "Similar Works" for this tender shall be Supply, Erection, Testing and commissioning work of: either Power supply receiving /distribution System of Voltage Level 66kV and above, Traction distribution System for Metro Rail/Suburban Rail/Main line Railways/Mono Rail/Tramways. or High voltage (33 kV and above) electrical power supply work involving transmission lines, Cabling, Transformers, Switch gear, Protection system in Power Plant / Power Transmission & Distribution works for Heavy industries like Cement, Steel, Petrochemicals. @ "Substantially completed" for criteria (a), (b) and (c) above, shall mean at least eighty percent (80%) completion (value wise) under the contract	satisfactorily and @Substantially completed. * "Similar Works" for this tender shall be Supply, Erection, Testing and commissioning work of: either Power supply receiving /distribution System of Voltage Level 66kV 33 kV and above, Traction distribution System for Metro Rail/Suburban Rail/Main line Railways/Mone Rail/Tramways. Alternatively, we propose below description: Power supply receiving /distribution System of Voltage Level 66kV and above AND/OR, Traction distribution System for Metro Rail/Suburban Rail/Main line Railways/Mono Rail/Tramways.	



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				criteria (a), (b) and (c) above, shall mean value of successfully completed portion of any ongoing works up to Cut-off Date (as confirmed in EQC para 8.1.6 above)n will also be considered for qualification of work experience criteria.	
13.	Volume I – NIT, ITT, EQC and LOT	PART 3: (EQC), Sub- Clause 10.2 Qualification Criterion; Sub clause: 10.2.1, Page (66 / 132)	PART 3: ELIGIBILITY CUM QUALIFICATION CRITERIA (EQC); Clause 10.2.1 a. A minimum number of one *"Similar Work" of value INR 413 Cr. that have been satisfactorily and @Substantially completed OR b. A minimum number of two *"Similar Works" each of value INR 258 Cr. or above, that have been satisfactorily and @Substantially completed OR c. A minimum number of three *"Similar Works" each of value INR 206 Cr. or	PART 3: ELIGIBILITY CUM QUALIFICATION CRITERIA (EQC); Clause 10.2.1 a A minimum number of one *"Similar Work" of value INR 413 Cr. that have been satisfactorily and @Substantially completed OR b A minimum number of two *"Similar Works" each of value INR 258 Cr. or above, that have been satisfactorily and @Substantially completed OR c A minimum number of three *"Similar Works" each of value INR 206 Cr. or above, that have been	Corrigendum is being issued separately.



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			above, that have been satisfactorily and @ Substantially completed. * "Similar Works" for this tender shall be Supply, Erection, Testing and commissioning work of: either Power supply receiving /distribution System of Voltage Level 66kV and above, Traction distribution System for Metro Rail/Suburban Rail/Main line Railways/Mono Rail/Tramways. or High voltage (33 kV and above) electrical power supply work involving transmission lines, Cabling, Transformers, Switch gear, Protection system in Power Plant / Power Transmission & Distribution works for Heavy industries like Cement, Steel, Petrochemicals. @ "Substantially completed" for criteria (a), (b) and (c) above, shall mean at least eighty percent (80%) completion (value wise) under the contract	satisfactorily and @Substantially completed. * "Similar Works" for this tender shall be Supply, Erection, Testing and commissioning work of: either "Power supply receiving /distribution System of Voltage Level 33KV and above, Traction distribution System for Metro Rail/Suburban Rail/Main line Railways/Mono Rail/Tramways." Alternatively, we propose below description: "Power supply receiving /distribution System of Voltage Level 66kV and above AND/OR Traction distribution system for Metro/Suburban Rail/Main Line Railways/Tramways." @ "Substantially completed" for criteria (a), (b) and (c) above, shall mean of successfully completed portion of any ongoing works up to Cut-off Date (as confirmed in EQC	



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				para 8.1.6 above) will also be considered for qualification of work experience criteria.	
14.	Vol-I	PART 3: (EQC), Sub- Clause 10.2 Qualification Criterion; Sub clause: 10.2.1, Page (66 / 132)	The clause mentions "Similar Works" for this tender shall be Supply, Erection, Testing and commissioning work of: either Power supply receiving /distribution System of Voltage Level 66kV and above, Traction distribution System for Metro Rail/Suburban Rail/Main line Railways/Mono Rail/Tramways. or High voltage (33 kV and above) electrical power supply work involving transmission lines, Cabling, Transformers, Switch gear, Protection system in Power Plant / Power Transmission & Distribution works for Heavy industries like Cement, Steel, Petrochemicals.	This clause restricts the bidder who have in 33kV experience however, not in Power plant / Power and heavy industries even being technically similar. "Similar Works" for this tender shall be Supply, Erection, Testing and commissioning work of: either Power supply receiving /distribution System of Voltage Level 66kV and above, Traction distribution System for Metro Rail/Suburban Rail/Main line Railways/Mono Rail/Tramways/Utilities. or High voltage (33 kV and above) electrical power supply work involving transmission lines, Cabling, Transformers, Switch gear, Protection system in Power Plant /	Corrigendum is being issued separately.



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				Power Transmission & Distribution works for Heavy industries like Cement, Steel, Petrochemicals / Utilities.	
15.	Volume-I - NIT, ITT, EQC and LOT	PART 3: (EQC), Sub- Clause 10.2 Qualification Criterion; Sub clause: 10.2.1, Page (66 / 132)	10.2- Work Experience- Similar Works" for this tender shall be Supply, Erection, Testing and commissioning work of: either Power supply receiving /distribution System of Voltage Level 66kV and above, Traction distribution System for metro Rail/Suburban Rail/Main line Railways/Mono Rail/Tramways. or High voltage (33 kV and above) electrical power supply work involving transmission lines, Cabling, Transformers, Switch gear, Protection system in Power Plant/ Power Transmission & Distribution works for Heavy industries like Cement, Steel, Petrochemicals	We request to kindly modify the similar nature of works as under:- 10.2- Work Experience- Similar Works" for this tender shall be Supply, Erection, Testing and commissioning work of: either Power supply receiving / distribution System of Vol t age Level 66kV and above, Traction distribution System for Metro Rail/Suburban Rail/Main line Railways/Mono Rail/ Tramways. or High voltage (33 kV and above) electrical power supply work involving transmission lines, Cabling, Transformers, Switch gear, Protection system in Power Plant/ Power Transmission & Distribution works for Heavy industries like Cement, Steel, Petrochemicals/ Any	Corrigendum is being issued separately.



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				Electricity Authority	
16.	Volume I – NIT, ITT, EQC and LOT	Part - 3 (EQC), Sub-Clause 10.2 Work experience Sub clause 10.2.2, Page (69 / 132)	Key Activities- For the contracts under para 10.2.1 and/or other contracts completed and under implementation, a minimum construction experience in the following key activities completed. a. RSS Construction, Supply, testing and commissioning of at least One Receiving Substations (GIS and AIS) with primary voltages 66kV and above along with other associated works.	PART 3: ELIGIBILITY CUM QUALIFICATION CRITERIA(EQC) Clause 10.2.2 Key Activities- For the contracts under para 10.2.1 and/or other contracts completed and under implementation, a minimum construction experience in the following key activities completed. a. RSS Construction, Supply, testing and commissioning of at least One Receiving Substations (GIS and or AIS) with primary voltages 66kV and above along with other associated works.	Corrigendum is being issued separately.
17.	Volume I – NIT, ITT, EQC and LOT	PART 3: (EQC), Sub- Clause 10.2 Qualification	Key Activities For the contracts under para 10.2.1 and/or other contracts completed and	Key Activities For the contracts under para 10.2.1 and/or other contracts completed and	Corrigendum is being issued separately.



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		Criterion; Sub clause: 10.2.2, Page (69 /132)	under implementation, a minimum construction experience in the following key activities completed: a. RSS	under implementation, a minimum construction experience in the following key activities completed: a. RSS	
			Construction, Supply, testing and commissioning of at least One Receiving Substations (GIS and AIS) with primary voltages 66kV and above along with other associated works	Construction, Supply, testing and commissioning of at least One Receiving Substations (GIS or AIS) with primary voltages 66kV and above along with other associated works	
18.	Volume I – NIT, ITT, EQC and LOT	PART 3: (EQC), Sub- Clause 10.2 Qualification Criterion; Sub clause: 10.2.2, Page (69 / 132)	Key Activities For the contracts under para 10.2.1 and/or other contracts completed and under implementation, a minimum construction experience in the following key activities completed: g. Stray Current Monitoring & Mitigation System# Supply, erection, testing and commissioning of Stray Current Monitoring & Mitigation System for Metro Rail/Suburban Rail/Main line Railways/Mono Rail/Tramways for 10	Key Activities For the contracts under para 10.2.1 and/or other contracts completed and under implementation, a minimum construction experience in the following key activities completed: g. Stray Current Monitoring# Supply, erection, testing and commissioning of Stray Current Monitoring System for Metro Rail/Suburban Rail/Main line Railways/Tramways for 10 Route Kilometre (RKM) or 20 Track	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			Route Kilometre (RKM) or 20 Track Kilometre (TKM).	Kilometre (TKM).	
19.	Volume I – NIT, ITT, EQC and LOT,	Part - 3 (EQC), Sub- Clause 10.2 Work experience, Sub clause 10.2.2, Page (69 /132)	Key Activities, ASS Supply, erection, testing and commissioning of at least 10 Auxiliary Substations with dry type transformer primary voltages 11kV and above voltage level	Currently more than 600 km Metrorail system is operational and more than 700 km is under construction in India. Out of this Kochi, Bangalore, Kanpur, Agra, Kolkata, Ahmedabad and Surat are of 3rd Rail system. We request your kind attention that till now no metro authority has asked "dry type transformer" under ASS qualification. We are enclosing EQC of all relevant traction tenders highlighting ASS qualification as annexure. Considering getting new certificate of a completed project is a very tough task, we request you to kindly amend the criteria as follows: "Supply, erection, testing and	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				commissioning of at least 10 Auxiliary Substations with dry type transformer primary voltages 11kV and above voltage level	
20.	Volume I – NIT, ITT, EQC and LOT,	Part - 3 (EQC), Sub- Clause 10.2 Work experience, Sub clause 10.2.2, Page (69 / 132)	Third Rail*** Supply, erection, testing and commissioning of 600 V DC or above Third rail Traction system for Metro Rail/Suburban Rail for minimum length of 10 Route Kilometre (RKM) or 20 Track Kilometre (TKM).	For the Key activities TSS, SCADA and Stray Current Monitoring & Mitigation System, the experience of respective key activities for Metro Rail/ Suburban Rail/ Mainline Railways/ Mono Rail/ Tramways are allowed but for the key activity -Third Rail, only the experience for Metro Rail/ Suburban Rail are mentioned and inadvertently the Main Line Railway/Mono Rail/ Tramways are missed. Request to kindly include the experience of Mono Rail / Tramways for the Key Activity Third Rail and amend the criteria requirement as below: (e) Third Rail*** Supply, erection, testing and	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				commissioning of 600 V DC or above Third Rail Traction System for Metro Rail/ Suburban Rail/ Main Line Railway/ Mono Rail/Tramways for minimum length of 10 Route Kilometer (RKM) or 20 Track Kilometer (TKM).	
21.		PART 3: (EQC), Sub- Clause 10.2 Qualification Criterion; Sub-clause: 10.2.2, Page (69 / 132)	(g) Stray Current Monitoring & Mitigation System*: Supply, erection, testing & commissioning of Stray Current Monitoring & Mitigation System for Metro Rail/ Suburban Rail/Main line Railways/ Mono rail/ Tramways for 10 Route Kilometre (RKM) or 20 Track Kilometre (TKM)	The stray Current Monitoring & Mitigation System is part of scope of any DC Traction system due to its high return current through third Rail conductors / Track Rail. Since Key activities third Rail & DC TSS are already covering the PQ requirement, there is no necessity to submit same project references for stray current Monitoring & Mitigation system. This is not a stand-alone key activity where you need a new specialist subcontractor to design or execute this activity. The DC Traction system and DC Third Rail system design will provide solution for the stray current mitigation based on the value of	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				return current, installation of Third Rail/Track Rail, and civil Infrastructure alignment. Considering the above, we request kindly delete the key activity. In Ahmedabad Metro Electrical Package EP-1 also this key activity was not included as PQ criteria. Request you to delete the clause.	
22.	Volume -I (IN09_Vol_I _NIT_ITT_ EQC_LOT)	PART 3: (EQC), Sub- Clause 10.2 Qualification Criterion; Sub clause: 10.2.2, Page (69 / 132)	Third Rail*** Supply, erection, testing and commissioning of 600 V DC or above Third rail Traction system for Metro Rail/Suburban Rail for minimum length of 10 Route Kilometre (RKM) or 20 Track Kilometre (TKM). 2. *** With respect to criteria (e) only, in case the tenderer or member of JV does not have inhouse experience of supply, erection, testing and commissioning of 600V or above DC 3rd rail system, it will be required by the	Third rail OEM's scope as a subcontractor does not include erection works, it is generally limited to preparation of installation drawings and supervision of installations. Under note 2 ***, we understand that criteria (e) can be met through a subcontractor which in this case is likely to be a Third rail OEM. Therefore, we request you to modify the criteria as below, Supply, erection supervision of	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			tenderer to engage suitable experienced sub-contractor having experience in supply, erection, testing and commissioning of 600V or above DC 3rd rail system, with minimum experience, as mentioned above. The credentials, work experience of the proposed 3rd rail work sub-contractor and their MOU with tenderer to participate in this tender should be submitted with this bid, failing which the bid shall be treated as non-responsive.	installations, testing and commissioning of 600 V DC or above Third rail Traction system for Metro Rail/ Suburban Rail for minimum length of 10 Route Kilometre (RKM) or 20 Track Kilometre (TKM).	
23.	Volume-I - NIT, ITT, EQC and LOT	PART 3: (EQC), Sub- Clause 10.2 Qualification Criterion; Sub clause: 10.2.2, Page (69 / 132)	ASS. Supply, erection, testing and commissioning of at least 10 Auxiliary Substations with dry type transform er primary voltages 11kV and above volt age level	ASS. Substation Supply, erection, testing and commissioning of at least 5 Substations with primary voltages 11kV and above voltage level	Corrigendum is being issued separately.
24.	Volume-I - NIT, ITT, EQC and	PART 3: (EQC), Sub- Clause 10.2	Cabling: Supply, installation, testing and commissioning of HV (33kV or above)	Cabling: Supply, installation, testing and commissioning of HV (33kV or	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	LOT	Qualification Criterion; Sub clause: 10.2.2, Page (69 / 132)	three phase cable network system for minimum length of 10 Route Kilometer (RKM).	above) three phase cable network system for minimum length of 2.0 Route Kilometer (RKM).	
25.	Volume-I - NIT, ITT, EQC and LOT	PART 3: (EQC), Sub- Clause 10.2 Qualification Criterion; Sub clause: 10.2.2, Page (69 / 132)	TSS: Supply, erection, testing and commissioning of at least 06 Traction substations of 600V DC or above with the use of AIS/GIS for Metro Rai I/ Suburban Rail/ Main line Railways/ Mono Rail/ Tramways.	We request the authority to allow this experience to be met through sub-contractor having experience in Traction substations of 600V DC or above, as allowed in the case of Third Rail and Str ay Current Monitoring & Mitigation System.	The Tender Conditions shall prevail.
26.	Volume I – NIT, ITT, EQC and LOT	PART 3: (EQC), Sub- Clause 10.3: Financial Standing; Sub-clause: 10.3.1, Page (72 /132)	The Tenderers will be qualified only if they have minimum financial capabilities as below: a. Liquidity: minimum INR 25 Crores [Refer Note iii below]. li. The Liquidity will be calculated based on following formula: Liquidity = WC + C - (2 * EC) Where	We request MPMRCL to allow bidder to consider WC = 0 (zero) for Liquidity calculation process in case WC is calculated negative from Current Assets – (Current Liabilities + Provisions) calculation	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			WC = Working Capital, calculated by {Current Assets – (Current Liabilities + Provisions)}, as per latest audited balance sheet. C = all available credits including lines of credit, overdraft facilities and other financial means EC = Monthly Existing Commitments		
27.	Volume I – NIT, ITT, EQC and LOT,	PART 3: (EQC), Sub- Clause 10.3: Financial Standing; Sub-clause: 10.3.1, Page (72 / 132)	Criteria Single J/V Consortium Combined Each Partner Must meet the Must meet at least criteria by to the percentage weighted average participation of each partner during last audited financial year C. Average Annual Turnover: average annual turnover from Power Supply and Traction Electrification Works of last five financial years should be minimum INR 147 Crores Requirement JV Consortium Combined Each Partner Must meet the Must meet at least criteria by to the percentage weighted average participation of each partner weighted average meet to file meet the Net Worth must be criteria by positive only weighted average method based on percentage participation of each partner c. Average Annual Turnover: average annual turnover from meet province and partner supply and Traction electrification Works of last five financial years should be minimum INR 147 Crores	For the JV/Consortium bidder, the Average Annual Turnover for the combined JV the requirement is 'Must meet the criteria by weighted average method based on percentage participation of each partner, but by mistake 'Not Applicable' is mentioned for Each member. Similar to Liquidity Criteria, kindly correct the Average Annual turnover for each member 'Must meet at least to the percentage participation of the criteria'.	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
28.	Volume I – NIT, ITT, EQC and LOT,	PART 3: (EQC), Sub- Clause 10.3: Financial Standing; Sub-clause: 10.3.1, Page (72 / 132)	b. Net Worth: minimum INR 52 Crore during last audited financial year	We request you to relook and modify the requirement as under "As the minimum requirement a Bidder's net worth calculated as the difference between total assets and total liabilities should be positive for any three years out of last five years" Above is as per the recent tenders already under execution and bidding. In support of same, we are enclosing herewith the similar requirement of net worth in Evaluation Criteria of other tenders under bidding as under:- 1. EQC of Chennai Metro Tender No. C4-PS&OHE-09 by CMRL 2. EQC of Agra Metro Tender No. AG-1&2 by UPMRCL. Request you to consider & modify as above.	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
29.	Volume I – NIT, ITT, EQC and LOT	PART 3: (EQC), Sub- Clause 10.3: Financial Standing; Sub-clause: 10.3.1, Page (72 / 132)	The Tenderers will be qualified only if they have minimum financial capabilities as below: c. Average Annual Turnover: average annual turnover from Power Supply and Traction Electrification Works of last five financial should be minimum INR 147 Crores	Most of our projects globally are integrated projects including combined scope of Electrification and Track works in same project so its not possible to collect the Electrification works alone specific financial data from various ongoing projects especially for our foreign entity in the short timeframe of bid preparation. So we request MPMRCL to allow Bidder to provide construction turnover of last five financial years, and if required MPMRCL can also increase the average turnover value requirement accordingly.	Segregated financial data for electrification work certified by your chartered accountant can be accepted. The Tender Conditions shall prevail.
30.	Volume I – NIT, ITT, EQC and LOT	PART 3: (EQC), Sub- Clause 10.3: Financial Standing; Sub-clause: 10.3.1, Page	Note: ii C = all available credits including lines of credit, overdraft facilities and other financial means Letter(s) (as per proforma given in Annexure – 6 of ITT) from Scheduled Bank(s) in India (meaning a bank which has been	We request MPMRCL to allow bidder of foreign entity to provide over draft letter from foreign Bank also. As its not possible for them to take the letter from Indian Bank if their major transaction is being handled by any foreign Bank. Also, the credit or overdraft facility if required by such	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		(72 / 132)	included in the Second Schedule of Reserve Bank of India Act, 1934, with subsequent amendments if any; including Scheduled Commercial Foreign Banks with branch in India), excluding Cooperative Banks, should clearly substantiate the amount of lines of credit, overdraft facilities and other financial means, as on the Credential Cut-Off Date (as confirmed in EQC para 8.1.6 above).	entity at project stage that will be used directly by entity from Bank to support project execution. So, we request MPMRCL to allow foreign entity to submit letter from foreign Bank also. However, all the Bank guarantees will be submitted from Scheduled Bank(s) in India.	
31.	Volume I – NIT, ITT, EQC and LOT	PART 3: (EQC), Sub- Clause 10.4: Bid Capacity Criteria; Sub-clause: 10.4.1, Page (74 / 132)	ii. Available bid capacity will be calculated based on the following formula: Available Bid Capacity = 2*A*N – B Where, A = Maximum of the value of Power Supply and Traction Electrification works executed in any one year during the last five financial years [updated up to the Credential Cut-Off Date (as confirmed in EQC para 8.1.6	Most of our projects globally are integrated projects including combined scope of Electrification and Trackwork's in same project so its not possible to collect the Electrification works alone specific financial data from various ongoing projects especially for our foreign entity in the short timeframe of bid preparation. So we request MPMRCL to allow Bidder to use construction turnover data for calculation of Bid Capacity	Segregated financial data for electrification work certified by your chartered accountant can be accepted. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			above) price level assuming 5% inflation for Indian Rupees every year (or part thereof) and 2% for foreign currency portions per year (or part thereof)].	criteria	
32.	Volume I – NIT, ITT, EQC and LOT	Part 4 (LOT) Appendix – 17, Page (111 / 132)	LETTER OF TENDER (LOT) Works in Hand Note: *[insert date] – Insert the Credential Cut-Off Date (as confirmed in EQC para 8.1.6)	Works in hand details for credential cut of date i.e. 30-10-2021, is not available as we have quarterly certified data, In this regard request MPMRCL to allow bidder to provide works in Hand data till 30-09-2021 also in option to current provision	The financial data in prescribed format shall be certified by Chartered Accountant in original under his signature & stamp & membership number or in case of foreign parties; by an Independent Chartered Accountant/ Certified Public Accountant/ Auditor. The Tender Conditions shall prevail.
33.	Volume II – Conditions of Contract (GC and PC)	GC Sub-Clause 1.1.47 Page (12 /210)	"JV Undertaking" means the letter provided to the Employer as part of the Tender setting out the legal undertaking between the two or more persons constituting the Contractor as a JV. This letter shall be signed by all the persons	In case of bidding by consortium consists of foreign entity and Indian entity. Please confirm our following understandings – 1. Each consortium member will have separate billing schedule as per	In case of the Contractor is a JV/ Consortium as defined under Sub-Clause 1.1.46 of General Conditions [Volume II], all the payments shall be made to the lead member of the JV/



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			who are members of the JV, shall be	respective scope of work in	Consortium; provided direct
			addressed to the Employer and shall	consortium agreement.	payment to individual members
			include:	2. Each consortium member will be	of the JV/ Consortium may also
			a. each such member's undertaking to	allowed to raise separate invoicing as	be made upon certification by
			be jointly and severally liable to the	per their scope of work & billing	the lead member. In the latter
			Employer for the performance of the	schedule. The invoices for all the	case Memorandum of
			Contractor's obligations under the	consortium members will be	Understanding or JV Agreement
			Contract;	submitted by Consortium Leader.	or JV Undertaking need to be
			b. identification and authorisation of the	3. Each consortium member will get	submitted to the Employer
			leader of the JV; and	paid separately to their respective	signed by all members to this
			C. identification of the separate scope	bank account against the invoices	effect and separate invoices of
			or part of the Works (if any) to be	raised by them.	respective JV/ Consortium
			carried out by each member of the JV.	4. Consortium will not be required to	members shall be submitted
				be registered as a taxable entity.	along with the lead member's
					certificate. The Contractor shall
				Please confirm the same	be subject to compliance with
					Laws and indemnify the
					Employer; in accordance with
					Sub-Clauses 1.13 of Conditions
					of Contract [Volume II].
					However, any recovery that may
					become due to the Employer
					shall be from the JV/
					Consortium members
					proportional to the share as



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
					stated in Memorandum of Understanding or JV Agreement or JV Undertaking. The Tender Conditions shall prevail.
34.	Volume II – Conditions of Contract (GC and PC)	GC Sub-Clause 1.1.47 Page (12 / 210)	"JV Undertaking" means the letter provided to the Employer as part of the Tender setting out the legal undertaking between the two or more persons constituting the Contractor as a JV. This letter shall be signed by all the persons who are members of the JV, shall be addressed to the Employer and shall include: a. each such member's undertaking to be jointly and severally liable to the Employer for the performance of the Contractor's obligations under the Contract; b. identification and authorisation of the leader of the JV; and c. identification of the separate scope or	In case of bidding by consortium consists of foreign entity and Indian entity. Please confirm our following understandings – 1. Each consortium member will have separate billing schedule as per respective scope of work in consortium agreement. 2. Each consortium member will be allowed to raise separate invoicing as per their scope of work & billing schedule. The invoices for all the consortium members will be submitted by Consortium Leader. 3. Each consortium member will get paid separately to their respective bank account against the invoices raised by them.	In case of the Contractor is a JV/ Consortium as defined under Sub-Clause 1.1.46 of General Conditions [Volume II], all the payments shall be made to the lead member of the JV/ Consortium; provided direct payment to individual members of the JV/ Consortium may also be made upon certification by the lead member. In the latter case Memorandum of Understanding or JV Agreement or JV Undertaking need to be submitted to the Employer signed by all members to this effect and separate invoices of respective JV/ Consortium



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			part of the Works (if any) to be carried out by each member of the JV.	Consortium will not be required to be registered as a taxable entity. Please confirm the same	members shall be submitted along with the lead member's certificate. The Contractor shall be subject to compliance with Laws and indemnify the Employer; in accordance with Sub-Clauses 1.13 of Conditions of Contract [Volume II]. However, any recovery that may become due to the Employer shall be from the JV/Consortium members proportional to the share as stated in Memorandum of Understanding or JV Agreement or JV Undertaking. The Tender Conditions shall prevail.
35.	Volume II – Conditions of Contract (GC and PC)	GC Sub- Clause 2.1 Page (24 / 210), GC Clause	GC Clause 2.1 - Right of Access to the Site; If the Contractor suffers delay as a result of a failure by the Employer to give any such right or	Ref 2.1 - We request you to reinstate GC clause 2.1 and provide EOT with cost compensation for delay due to Right of access to site on account of	Ref PC Clause 2.1 - Right of Access to the Site Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		4.13 Page (44 / 210) & GC Clause 4.15 Page (45 / 210)	possession within such time, the Contractor shall be entitled to only a reasonable extension of time and no monetary claims whatsoever shall be paid or entertained on this account. GC Clause 4.13, Page (44 of 210) 4.13 Rights of Way and Facilities: The Contractor shall bear all costs and charges for special and/or temporary rights-of-way which may be required for the purposes of the Works, including those for access to the Site. Any tax(es) and lease rent if applicable for the land provided by the Employer outside the construction ROW (except logistics area) shall be recovered from the Contractor. The Contractor shall also obtain, at the Contractor's risk and cost, any additional facilities outside the Site which may be required for the purposes of the Works.	employer. Ref 4.13 - All kinds of Right to Access must be in Employers Scope, Contractor shall notify Employer for any temporary, special or additional work	Ref 4.13 - Regarding GC 4.13: Tender conditions shall prevail.
			PC Clause 4.15: Access route To the extent that non-suitability or non-	Ref 4.5 Access route Request you to re-instate the GCC clause 4.5 to	The GCC clause 4.5 is erroneously mentioned by the



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			availability of an access route arises as a result of changes to that access route by the Employer or a third party after the Base Date and as a result the Contractor suffers delay and/or incurs Cost, the Contractor shall be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to EOT and/or payment of such Cost.	include EOT and Cost for non- suitability or non-availability of an access route arises as a result of changes to that access route by the Employer or a third party	tenderer. The correct sub- clause is PC 4.15 - Access Route. The Tender Conditions shall prevail.
36.	Volume II – Conditions of Contract (GC and PC)	GC Sub-Clause 1.13 Page (21 / 210) & PC Part B – Special Provisions, Sub-Clause 1.13 Page (156 / 210)	GC 1.13 - Compliance with Laws PC 4.13 - Right of Way and Facilities	We request to confirm that all the statutory charges/Fees /Deposits paid for getting permission/approval from any Govt. bodies/Municipal corporations shall be reimbursed by the Employer as per actuals, on production of valid Documents. The same practice followed in all other metro tenders. In case of reimbursement from the employer same shall not be part of bid price. Kindly Confirm.	Corrigendum is being issued separately.
37.	Volume - II	GC Sub- Clause 7.4,	PC 7.4 Testing by the Contractor	We understand cost of any additional Test not mentioned in	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		Page (55 / 210) PC part B - Special Provisions Sub-clause No. 7.4 Page (170/210)		Contract shall be borne by the employer. Please confirm.	
38.	Volume II – GC & PC	GC Sub-Clause 7.7 Page (57/210). PC Part-B Special Provisions Sub-clause no. 7.7 Page (170/210)	GC 7.7 Ownership of Plant and Materials Each item of Plant and Materials shall, to the extent consistent with the mandatory requirements of the Laws of the Country, become the property of the Employer at whichever is the earlier of the following times, free from liens and other encumbrances: a. when it is delivered to the Site; b. when the Contractor is paid the value of the Plant and Materials under Subclause 8.11 [Payment for Plant and Materials after Employer's Suspension];	In case of bidding by consortium consists of Foreign entity and Indian entity. 1. In case offshore supplies by foreign consortium member, the ownership of such supplies will be transferred to employer on High Seas / outside India. 2. For such offshore supplies by foreign consortium member, Employer will be importer on records and employer's IEC will be used for customs clearance. Please confirm the same.	1. In case of off-shore supplies and services the ownership of such supplies will be transferred to employer on High Seas / outside India: 2. For such of Off-Shore supplies the IEC of Employer may be used. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			or c. when the Contractor is paid the amount determined for the Plant and Materials under Sub-Clause 14.5 [Plant and Materials intended for the Works].		
39.	Volume II – Conditions of Contract (GC and PC)	GC Sub-Clause 7.7 Page (57 / 210) PC Part-B Special Provisions Sub-clause no. 7.7 Page (170/210)	GC 7.7 Ownership of Plant and Materials Each item of Plant and Materials shall, to the extent consistent with the mandatory requirements of the Laws of the Country, become the property of the Employer at whichever is the earlier of the following times, free from liens and other encumbrances: a. when it is delivered to the Site; b. when the Contractor is paid the value of the Plant and Materials under Sub Clause 8.11 [Payment for Plant and Materials after Employer's Suspension]; or c. when the Contractor is paid the amount determined for the Plant and Materials	In case of bidding by consortium consists of foreign entity and Indian entity. 1. In case offshore supplies by foreign consortium member, the ownership of such supplies will be transferred to employer on High Seas / outside India. 2. For such offshore supplies by foreign consortium member, Employer will be importer on records and employer's IEC will be used for customs clearance. Please confirm the same.	1. In case of off-shore supplies and services the ownership of such supplies will be transferred to employer on High Seas / outside India: 2. For such of Off-Shore supplies the IEC of Employer may be used. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			under Sub-Clause 14.5 [Plant and Materials intended for the Works].		
40.	Volume II – Conditions of Contract (GC and PC)	GC Sub- Clause 10.3, Page (68 / 210)	GC 10.3 - Interference with Tests on Completion	Kindly reinstate the GC 10.3 clause	The query is infructuous as GC 10.3 is not replaced by PC.
41.	Volume II – Conditions of Contract (GC and PC)	Clause 14.1	14.1 The Contract Price *the Contractor shall pay all taxes, duties and fees required to be paid by the Contractor under the Contract, and the Contract Price shall not be adjusted for any of these costs, except as stated in Sub-Clause 13.6 [Adjustments for Changes in Taxes]"	In the recent years quite a few changes have been introduced like GST, Cess, etc. In view of the above, it is requested to retain the original clause of GC 14.1 which is as under "the Contractor shall pay all taxes, duties and fees required to be paid by the Contractor under the Contract, and the Contract Price shall not be adjusted for any of these costs, except as stated in Sub-Clause 13.6 [Adjustments for Changes in Laws]"	The Tender Conditions shall prevail.



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42.	Volume II – Conditions of Contract (GC and PC)	GC Clause 14 Contract Price & Payment Sub Clause 14.1 (b), Page (83 /210)	14.1 The Contract Price	As per our understanding, The GST applicable for this contract will be of works contract which is 12%. Kindly confirm	The Bidder may verify with the concerned authority. The Tender Conditions shall prevail.
43.	Volume II – Conditions of Contract (GC and PC)	GC Sub- Clause 14.7, Page (90 / 210)	14.7 – Payment Payment of the amount due in each currency shall be made into the bank account, nominated by the Contractor, in the payment country (for this currency) specified in the Contract.	If case of JV, kindly confirm that the Lead bidder's nominated bank account shall be considered for remitting the payment.	The tender conditions shall prevail
44.	Volume II – Conditions of Contract (GC and PC)	GC Sub- Clause 14.9 (Release of Retention Money) Page (91 / 210) & PC Part - A Contract	14.9. Release of Retention Money After the issue of the Taking-Over Certificate for: a. the Works, the Contractor shall include the first half of the Retention Money in a Statement; or b. for a Section, the Contractor shall include the relevant percentage of the first half of the Retention Money in a Statement.	We request to substitute recovery of retention money with bank guarantee of equivalent value.	Release of Retention Money. Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		Data S. No. 27, Page (146 /210)	PC 27. Percentage of Retention Money: Five percent (5%) from each IPC PC 28. Limit of Retention Money: Five percent (5%) of Contract Price		No change in PC 27 & PC 28. The Tender Conditions shall prevail.
45.	Volume II – Conditions of Contract (GC and PC)	GC Sub- Clause 14.9, Page (91 / 211)	14.9 Release of Retention Money	Request MPMRCL to allow bidder to encash Amount deducted as Retention money on each IPC against submission of Retention BG for equivalent amount on quarterly basis. Accordingly, below clause needs to be added in tender:	Corrigendum is being issued separately.
46.	Volume II – Conditions of Contract (GC and PC)	GC Sub- Clause 14.9 Release of Retention Money, Page (91 /210)	After the issue of the Taking-Over Certificate for: a. the Works, the Contractor shall include the first half of the Retention Money in a Statement; or b. for a Section, the Contractor shall include the relevant percentage of the first half of the Retention Money in a Statement. After the latest of the expiry dates of the	Since we are submitting separate Performance security, We request to accept release of the complete retention after Taking over certificate. Request to accept the same.	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			Defects Notification Periods, the Contractor shall include the second half		
			of the Retention Money in a Statement		
			promptly after such latest date. If a		
			Taking-Over Certificate was (or was		
			deemed to have been) issued for a		
			Section, the Contractor shall include the		
			relevant percentage of the second half		
			of the Retention Money in a Statement		
			promptly after the expiry date of the		
			DNP for the Section.		
			In the next IPC after the Engineer		
			receives any such Statement, the		
			Engineer shall certify the release of the		
			corresponding amount of Retention		
			Money. However, when certifying any		
			release of Retention Money under Sub-		
			Clause 14.6 [Issue of IPC], if any work remains to be executed under Clause		
			11 [Defects after Taking Over], the		
			Engineer shall be entitled to withhold		
			certification of the estimated cost of this		
			work until it has been executed.		
			The relevant percentage for each		
			Section shall be the percentage value of		



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			the Section as stated in the Contract Date. If the percentage value of a Section is not stated in the Contract Data, no percentage of either half of the Retention Money shall be released under this Sub-Clause in respect of such Section.		
47.	Volume II – Conditions of Contract (GC and PC)	GC Sub- Clause 14.9, Page (91 /210)	After the issue of the Taking-Over Certificate for: a. the Works, the Contractor shall include the first half of the Retention Money in a Statement; or b. for a Section, the Contractor shall include the relevant percentage of the first half of the Retention Money in a Statement.	Request Employer to incorporate the clause as below: "The Contractor may, at his option, replace the Retention Money with an unconditional bank guarantee from a Scheduled Bank in India (meaning a bank which is included in the Second Schedule of Reserve Bank of India Act, 1934, and includes Scheduled Commercial Foreign Banks with an Indian branch), excluding Cooperative Banks, payable in Indore/ Mumbai/ New Delhi, in the form acceptable to the Employer (generally similar to the Performance Security)" from 1st IPC itself."	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				This will help the Contractor maintain cashflow position for the project, without posing a risk to the Employer.	
48.	Volume II – Conditions of Contract (GC and PC)	GC Sub-Clause 16.1(b), Page (99 / 210) & PC Part - B Special Provisions Sub-Clause 16.1, Page (186 /210)	GC 16.1 Suspension by Contractor GC clause 16.1 (b). the Employer fails to provide reasonable evidence in accordance with Sub Clause 2.4 [Employer's Financial Arrangements]; PC clause 16.1. Replace Sub-Clause 16.1 (b) with following: [Not Used]	Providing financial information by the employer to the contractor is an integral part of the contract & FIDIC Conditions. In the absence of the above, empowering the contractor with the right to suspend the work is a fair & neutral condition. In view of the above it is requested to retain GC "b. the Employer fails to provide reasonable evidence in accordance with Sub- Clause 2.4 [Employer's Financial Arrangements]; "& modify PC suitably.	The Tender Conditions shall prevail.
49.	Volume II – Conditions of Contract (GC and PC)	GC Clause 18 Exceptional Events Sub Clause 18.1 of GC, Page	GC 18.1 - Exceptional Events PC - Part-A Contract Data S. No 39. List of risks which shall not be excluded from the insurance arising from	As a general insurance policy, No insurance company covers the exceptional events mentioned in Clause 18.1 Point a), b) and e) except terrorism. In view of the above, it is requested to modify	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		(106 / 210) & PC Part-A Contract Data S. No 39, Page (147 /210)	Exceptional Events.	clause 39 of PC / 18.1 of GC suitably.	
50.	Volume II – Conditions of Contract (GC and PC)	GC Clause 18 Exceptional Events, Sub Clause 18.1, Page (106 / 210)	18.1 - Exceptional Events "Exceptional Event" means an event or circumstance which: a. is beyond a Party's control	Considering present situation, we request you to add epidemic, pandemic also under events beyond the control of the employer and the contractor, which makes it impossible or illegal for a party to perform. Kindly accept and confirm.	Corrigendum is being issued separately.
51.	Volume II – Conditions of Contract (GC and PC)	GC Clause 9 Fees & Expenses, Page (128/ 210)	9. Fees and Expenses 9.1 The DAAB Member shall be paid as follows, in the currency named in the DAAB Agreement: a. a monthly fee, which shall be a fixed fee as payment in full for	DAAB monthly fees expenses during the contract execution is not provided in the document, which need to be considered by the bidder in the tender consideration. Kindly provide the same for consideration in our bid	The price bid is deemed to include the fees/expenses of DAAB. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			b. a daily fee, which shall be considered as payment in full for each day C. all reasonable expenses, including necessary travel expenses (air fare in business class or equivalentd. any taxes properly levied in the Country on payments made to theunder this Sub-Clause 9.1.	price.	
52.	Vol II Conditions of Contract (GC & PC)	PC Part A - Contract Data, Page (143 / 210) Point 14.	14. Right of access to site. i. Construction Right of Access for Receiving Substations (RSS), and Depot TSS at Gandhi Nagar Depot will be handed over within 150 days from the commencement date ii. Construction Right of Access for Receiving Substations (RSS) at	1. Bidder requests the Customer to provide the access to start the RSS building works at Gandhi Nagar Depot to be handed over within 45 days from the commencement to align with PSKD06.2 2. Bidder requests the engineer to provide the access to start the RSS	The Tender Conditions shall prevail. Corrigendum is being issued separately.
			ISBT/MR-10 Flyover will be handed over after 270 days from the commencement date.	building works at ISBT/MR-10 Flyover to be handed over within 75 days from the commencement to align with PSKD06.2A	ioded departitory.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
53.	Vol II Conditions of Contract (GC & PC)	PC Part A - Contract Data, Page (143 / 210)	14. Right of access to site. vi. Construction Right of access for Khajrana Square RSS and TSS / ASS/ cabling and third rail installation for balance sections (From Mumtaj Bag to Indore railway Station) and Underground Section from Indore Railway Station to Gandhi Nagar will be handed over progressively in line with the progress of civil construction works as per approved Programme	Bidder requests the Customer to provide access dates for stations, other than priority section, in line with the Key Dates of respective section/station.	The Tender Conditions shall prevail.
54.	Volume II – Conditions of Contract (GC and PC)	PC Part A – Contract Data, SL N0 23, Page (145 / 210)	The first instalment shall be paid upon start of mobilisation. It shall be paid against an Advance Payment Certificate, under Sub Clause 14.2.2	Bidder could not understand definition of mobilization. Bidder understands that advance payment will be released against an Advance Payment Certificate, under Sub Clause 14.2.2. Please confirm.	Corrigendum is being issued separately.
55.	Volume II – Conditions of Contract (GC and PC)	PC Part A – Contract Data, SL N0 21, Page (145 /210)	PC Part-A Contract Data - Maximum amount of delay damages (S. no 21) Part A – Contract Data 20. Delay Damages 21. 21 Maximum amount of delay	We request to modify maximum amount of delay damages to 5% instead of 10%.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			damages 8.8 and 15.2.1 (c) Ten percent (10%) of the Contract Price		
56.	Volume II – Conditions of Contract (GC and PC)	PC Part A - Contract Data KEY DATES, S. No. 32, Page (147 / 210)	PC Part-A Contract Data - S.NO 32 Period of Interim Payment 14.7 (b) (i) Payment of IPC shall be released within forty- two (42) days of submission of IPA with all the required documents by the Contractor. The Contractor can submit a maximum of one IPC every month provided he achieves supply or Installation or both of value 1% of the contract value for raising the IPC.	We understand submission of IPA indicated in this clause represent submission of Statement and supporting document to Engineer. Kindly confirm	Corrigendum is being issued separately.
57.	Volume II – Conditions of Contract (GC and PC)	PC Part A – Contract Data, SL N0 32, Page (147 / 210)	PC Part A – Contract Data, Period of Interim Payment (SL N0 32) Period of Interim Payment: Payment of IPC shall be released within forty-two (42) days of submission of IPA with all the required documents by the Contractor.	Bidder request MPMRCL to revise the Period of Interim Payment as following which is in line with all recent metro projects: After preliminary scrutiny and certification by the Engineer, payment of 80% of the certified interim amount shall be made by the Employer within 14 days. The amount certified shall account for all	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				deductions, including statutory deductions, recoveries for advances and any amounts due from the Contractor. The balance 20% shall be paid within 28 days, from the date of the preliminary certification of the bill by the Engineer.	
58.	Volume II – Conditions of Contract (GC and PC)	PC Part A – Contract Data, SL N0 32, Page (147 / 210)	PC Part A – Contract Data, Period of Interim Payment (SL N0 32) The Contractor can submit a maximum of one IPC every month provided he achieves supply or Installation or both of value 1% of the contract value for raising the IPC.	Bidder request MPMRCL to revise the clause as - The Contractor can submit a maximum of one IPC every month provided he achieves supply or Installation or both of value 1% 0.5% of the contract value for raising the IPC, except during the Design phase & DLP phase. During the Design phase & DLP phase, kindly allow to raise IPC at actual on monthly basis	Corrigendum is being issued separately.
59.	Volume II – Conditions of Contract (GC and	PC Part A – Contract Data, SL N0	PC Part A – Contract Data, Period of Interim Payment (SL N0 32) Period of Final Payment: Ninety (90)	Bidder request MPMRCL to reduce the duration for the Period of Final Payment: Fifty-six (56) days	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	PC)	32, Page (147 /210)	days		
60.	Volume II – Conditions of Contract (GC and PC)	Annexure–1 to Part A - Contract Data KEY DATES, Page (150/ 210)	Delay Damages for no achieving the Key Dates: 0.01% of accepted contract value per week of delay or part thereof	We request to MPMRCL to apply Delay damage only for "contract value impacted due to delay in achieving in respective Key dates" instead of applying on complete Contract value. As applying delay damage on complete accepted contract value means it is also applied on value of work which is done or which was not projected to be done in that timeline. Hence, we request to modify the tender clause accordingly	The Tender Conditions shall prevail
61.	Volume II – Conditions of Contract (GC and PC)	Annexure–1 to Part A - Contract Data KEY DATES, Page (153 / 210)	Note: 2. Delay Damages levied for key dates - GEKD01, GEKD02, GEKD03, GEKD04 & GEKD05 will be refunded if the subsequent key dates are achieved for priority corridors of Indore Metro including related compliances etc.	In similar line as in clause Note 2, we request MPMRCL to refund the Delay Damages levied in all previous key dates, if the subsequent key date are achieved for respective section or Taking over of complete works is achieved within the stipulated dates of Completion of the Facilities, or the	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				extended period of completion where such extension has been granted. Similar provision is there in most to Indian Metro tender. We request to add the same as addition note to this Annexure.	
62.	Volume II – Conditions of Contract (GC and PC)	Annexure–1 to Part A - Contract Data Notes Page (153 / 210)	Note: 1. * The key dates PSKD07.1 to PSKD 07.8 and PSKD 08.1 to PSKD08.6 are tentative and these will be firmed up after mobilisation of civil contractors and firming up of shared Access dates	Bidder request to waive-off the LD against they KD, since it depend upon the interface/Civil contractors OR please provide confirmed access dates for Key Dates from PSKD07.1 to PSKD 07.8 and from PSKD 08.1 to PSKD08.6.	The Tender Conditions shall prevail
63.	Volume II – Conditions of Contract (GC and PC)	Annexure–1 to Part A - Contract Data Notes Page (153/ 210)	Note: 2. Delay Damages levied for key dates - GEKD01, GEKD02, GEKD03, GEKD04 & GEKD05 will be refunded if the subsequent key dates are achieved for priority corridors of Indore Metro including related compliances etc.	Not only for key dates - GEKD01, GEKD02, GEKD03, GEKD04 & GEKD05, but for other subsequent Key Dates also, Bidder requests to reimburse Delay Damages if Overall Key Date of that corridor Or Project (for all corridors) are achieved. Please confirm	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
64.	Vol II Conditions of Contract (GC & PC)	PC Part B – Special Provisions, Sub-Clause 1.5 Page (155 / 210)	PC 1.5 - Priority of Documents	In case of any conflict between Technical Specification and BOQ, we understand that BOQ/preamble shall prevail. Please confirm our understanding.	Technical Specifications (Vol-IV) has priority over drawings. The drawings have priority over BOQ. The Tender Conditions shall prevail.
65.	Volume II – Conditions of Contract (GC and PC)	PC Part B – Special Provisions, Sub-Clause 1.13 Page (156 / 210)	PC 1.13 - Compliance with Laws The Contractor shall give all notices, pay all taxes, duties and fees, securities and obtain all other permits, permissions, licences and/or approvals, as required by the Laws in relation to the execution of the Works. The Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so unless the failure is caused by the Employer's failure to comply with Sub- Clause 2.2 [Assistance];	As per tender document, it shall be Contractor's exclusive responsibility to get approvals, permits or license required for the Contract. We presume that our scope is limited to getting approval from CEIG and necessary labour licence only. Kindly confirm our understanding.	Corrigendum is being issued separately.
66.	Volume II – Conditions of Contract	PC Part - B Special Provisions	PC 1.9 - Delayed Drawings or Instructions	With Reference to PC 1.9 We request you to Reinstate GC clause 1.9	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	(GC and PC)	Sub-Clause 1.9, Page (156 / 210)	Replace the second paragraph: "If the Contractor suffers delay and/or incurs Cost as a result of a failure of the Engineer to issue the notified drawings or instruction within a time which is reasonable and is specified in the Notice with supporting details, the Contractor shall be entitled subject to Sub-Clause 20.2 [Claim for Payment and/or EOT] to EOT and/or payment of such Cost Plus Profit." with "If the Contractor suffers delay and/or incurs Cost as a result of a failure of the Engineer to issue the notified drawings or instruction within a time which is reasonable and is specified in the Notice with supporting details, the Contractor shall be entitled to EOT only subject to Sub-Clause 20.2 [Claim for Payment and/or EOT] and no monetary claims whatsoever shall be paid or entertained on this account."		
67.	Volume II – Conditions	PC Part B – Special	PC 1.9 Delayed Drawings or Instructions	Request MPMRCL to reinstate GC clause against delay not due to	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	of Contract (GC and PC)	Provisions, Sub-Clause 1.9, Page (156 /210)	"If the Contractor suffers delay and/or incurs Cost as a result of a failure of the Engineer to issue the notified drawings or instruction within a time which is reasonable and is specified in the Notice with supporting details, the Contractor shall be entitled to EOT only subject to Sub-Clause 20.2 [Claim for Payment and/or EOT] and no monetary claims whatsoever shall be paid or entertained on this account."	contractor fault as below: "If the Contractor suffers delay and/or incurs Cost as a result of a failure of the Engineer to issue the notified drawings or instruction within a time which is reasonable and is specified in the Notice with supporting details, the Contractor shall be entitled subject to Sub- Clause 20.2 [Claim for Payment and/or EOT] to EOT and/or payment of such Cost Plus Profit."	
68.	Conditions	PC Part B – Special Provisions, Sub-Clause 1.6 Page (156 / 210)	PC 1.6 - Contract Agreement The Parties shall sign a Contract Agreement within 35 days after the Contractor receives the Letter of Acceptance, unless they agree otherwise. The Contract Agreement shall be based on the form annexed to the Particular Conditions. The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the Contractor.	Kindly confirm the value of stamp charges for the same.	The contractor need to obtain the Stamp charges applicable from the Office registrar of MP Govt for registration of Contract document. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
69.	Conditions	PC Part B – Special Provisions, Sub-Clause 2.1, Page (157 / 210)	PC 2.1 Right of Access to the Site If the Contractor suffers delay as a result of a failure by the Employer to give any such right or possession within such time, the Contractor shall be entitled to only a reasonable extension of time and no monetary claims whatsoever shall be paid or entertained on this account.	Request MPMRCL to reinstate GC clause against delay not due to contractor fault as below: If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Employer to give any such right or possession within such time, the Contractor shall be entitled subject to Sub-Clause 20.2 [Claims for Payment and /or EOT] or EOT and/or payment of such cost-plus profit.	Corrigendum is being issued separately.
70.	Conditions	PC Part B – Special Provisions, Sub-Clause 2.4, Page (158 / 210)	PC 2.4 Employer's Financial Arrangement Sub-Clause 2.4 is deleted	Request MPMRCL to reinstate GC clause as financial arrangements of both the parties shall be updated to respective other parties as good practices for project execution.	The Tender Conditions shall prevail.
71.	Conditions	PC Part - B Special Provisions Sub-Clause 2.4, Page	PC 2.4 - Employer's Financial Arrangements Employer's financial arrangement- deleted in PC	Kindly reinstate the GC 2.4 clause	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		(158 of 210)			
72.	Volume II – Conditions of Contract (GC and PC)	PC Part - B Special Provisions Sub-Clause 4.2, Page (160 / 210)	PC 4.2 - Performance Security PC 4.2 Add following new Sub-Clause 4.2.4 at the end of GC Sub-Clause 4.2: 4.2.4 Guarantees and Warranties In the case, the Contractor (or any member of the JV/ Consortium as applicable) is/are subsidiary company of their parent company, within 30 days after receiving the Letter of Acceptance, the Contractor shall submit to the Employer: (a) An undertaking in the approved format (as provided in Schedule 2) from a Parent Company, the identity of which shall have been submitted in writing to the Employer prior to acceptance of the Tender and against which the Employer shall have raised no objection. (b) A written guarantee in the approved format (as provided in Schedule 3) from a Parent Company, the identity of which shall have been submitted in writing to	qualification requirement. Alternatively add below clause at the end of PC 4.2 clause: Note: Note: The Parent Company Undertaking	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			the Employer prior to acceptance of the Tender and against which the Employer shall have raised no objection. (c) A warranty in the approved format (as provided in Schedule 4) from the Contractor. In the event that the Contractor shall comprise two or more members, corporations acting in partnership, joint venture, consortium or otherwise each such member or corporation shall submit a Parent Company Undertaking and Guarantee.		
73.	Volume II – Conditions of Contract (GC and PC	PC Part B – Special Provisions, Sub-Clause 4.2, Page (160 / 210)	PC 4.2 Add following new Sub-Clause 4.2.4 at the end of Sub-Clause 4.2: 4.2.4 Guarantees and Warranties In the case, the Contractor (or any member of the JV/ Consortium as applicable) is/are subsidiary company of their parent company, within 30 days after receiving the Letter of Acceptance, the Contractor shall submit to the	Request MPMRCL to delete the requirement of Parent Company Undertaking and Parent Company Guarantee as the Bidder is not allowed to use Parent or Sister company credentials and participating entity on its own credential is qualifying the required qualification requirement.	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			Employer: (a) An undertaking in the approved format (as provided in Schedule 2) from a Parent Company, the identity of which shall have been submitted in writing to the Employer prior to acceptance of the Tender and against which the Employer shall have raised no objection. (b) A written guarantee in the approved format (as provided in Schedule 3) from a Parent Company, the identity of which shall have been submitted in writing to the Employer prior to acceptance of the Tender and against which the Employer shall have raised no objection	Guarantee shall not be necessary in the case of the Bidder is not using experience / credentials of Parent Company (Associate / Affiliate) for the purpose of qualifying requirements (as per Section	
74.	Volume II – Conditions of Contract (GC and PC)	PC Part B – Special Provisions, Sub-Clause 4.2 Page (160 / 210)	PC 4.2 - Performance Security "The Contractor shall deliver the Performance Security to the Employer, with a copy to the Engineer, within 14 days after receiving the Letter of Acceptance."	As per the normal practice in other Metro/Govt Utility tenders minimum 28 days given for the submission of Performance Security to the Employer from date of LOA, it is considering time taken by the Bank for processing the Bank Securities (around 3 weeks' time)	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				In case of JV with foreign contractors, the foreign banks will take considerable time to process the BG. Considering the above, Kindly accept changes as per below "The Contractor shall deliver the Performance Security to the Employer, with a copy to the Engineer, within 28 days after receiving the Letter of Acceptance."	
75.	Volume II – Conditions of Contract (GC and PC)	PC Part - B Special Provisions Sub-Clause 4.7, Page (162 / 210)	PC 4.7 - Setting Out Add following after Sub Clause 4.7 (d): (e) Setting out of lines & levels: Common Benchmark data/ point shall be transferred and established at Site duly checked and signed jointly by interfacing viaduct/ station and depot contractors. Sub-Clauses 4.7.2 and 4.7.3 are deleted.	With Reference to PC 4.7 We request you to Reinstate GC clause 4.7	The Tender Conditions shall prevail.
76.	Volume II –	PC Part - B	PC 4.12 - Unforeseeable Physical	With Reference to PC 4.12 We	The Tender Conditions shall



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Conditions of Contract (GC and PC)	Special Provisions Sub-Clause 4.12, Page (163 / 210)	Replace entire Sub-Clauses 4.12 with the following: In this Sub-Clause, "physical conditions" means natural physical conditions and physical obstructions (natural or man- made) and pollutants, which the Contractor encounters at the Site during execution of the Works, including sub-surface and hydrological conditions but excluding climatic conditions at the Site and the effects of those climatic conditions. The Employer makes no representations or warranties of any type regarding the physical conditions at the Site. Any information provided by the Employer to the Contractor regarding the physical conditions at the Site shall be interpreted and verified by the Contractor. The Contractor bears the entire risk of	request you to Reinstate GC clause 4.12	prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			any and all physical conditions at the Site. The Contractor represents and warrants to the Employer that it has fully assessed all possible physical conditions and has priced and allowed for their risks, if any, in the Accepted Contract Amount. If the Contractor encounters physical conditions which he considers having been Unforeseeable, the Contractor shall give notice to the Engineer as soon as possible. This notice shall describe the physical conditions, so that these can be inspected by the Engineer, and shall confirm the reasons why the Contractor considers them to be Unforeseeable. The Contractor shall continue executing the Works, until such time proper and reasonable measures as are appropriate for the physical conditions. The Contractor shall if so, required comply with any instructions issued by the Employer or		



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			the Engineer.		
77.	Conditions	PC Part - B Special Provisions Sub-Clause 4.13, Page (164 / 210)	PC 4.13 - Right of Way and Facilities Replace entire sub-clause 4.13 with the following: The Contractor shall bear all costs and charges for special and/or temporary rights-of-way which may be required for the purpose of the Works, including those for access to the site. Any tax(es) and lease rent of applicable for the land provided by the Employer outside the construction ROW (except logistic area) shall be recovered from the Contractor. The Contractor shall also obtain, at the Contractor's risk and cost, any additional facilities outside the site which may be required for the purposes of the works.	It is very difficult to assess the charges at bid stage as routes of cables get changes very often and these charges are generally very high. We request MPMRCL to include the following in the clause in line with other Metro projects (DMRC) for competitive and equal cost level: Payment deposited to Govt./Civic agencies: Any amount deposited by Contractor to civic agencies for obtaining cable laying permission / ROW charges shall be reimbursed by MPMRCL on submission of documentary evidence	Corrigendum is being issued separately.
78.	Conditions	PC Part - B Special Provisions Sub-Clause	PC 4.23 - Archaeological and Geological Findings "If the Contractor suffers delay and/or	With Reference to PC 4.23 - We request you to Reinstate GC clause 4.23	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	PC)	4.23, Page (167 /210)	incurs Cost from complying with the Engineer's instructions, the Contractor shall not be entitled to EOT and/or payment of such Cost."		
79.	Volume II – Conditions of Contract (GC and PC)	PC Part - B, Special Provisions Sub-Clause 6.4, Page (169 /210)	PC 6.4 - Labour Laws The Contractor shall comply with all the relevant labour Laws applicable to the Contractor's Personnel, including Laws relating to their employment (including wages and working hours), health, safety, welfare, immigration and emigration, and shall allow them all their legal rights. The Contractor shall require the Contractor's Personnel to obey all applicable Laws, including those concerning health and safety at work.	We understand that BOCW cess @1% will be applicable only on the Civil, construction & service portion in the project. Kindly confirm	"Pursuant to the Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996, the Contractor shall be liable for BOCW Cess, its applicability and the Contract Price shall be deemed inclusive of BOCW Cess. In case the contractor considers that the BOCW Cess shall not be applicable partially or fully (for portions of supply, services and/ or both, as the case may be), then the Employer shall levy and deposit BOCW Cess accordingly, subject to submission of appropriate



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
					undertaking/ certificate by the Contractor. The Contractor shall indemnify and hold harmless the Employer against and from all claims arising out of or in this regard." The Tender Conditions shall prevail
80.	Volume II – Conditions of Contract (GC and PC)	PC Part B – Special Provisions, Clause 6.6 Page (170 / 210)	PC 6.6 - Facilities for Staff and Labour: The Contractor shall obtain prior permission from the Employer (at his sole discretion) for any accommodation and welfare facilities for the Contactor's personnel including labour camps within the areas provided by the Employer	As per this clause, Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. Kindly confirm that Necessary Space required for Contractor's Site office, Storage and Labour colony shall be provided by MPMRCL free of cost.	The Employer may consider providing space in the depot (if available) up to 300sqm for contractor's temporary site office on applicable charges. The Tender Conditions shall prevail.
81.	Volume II – Conditions of Contract (GC and PC)	PC Part - B, Special Provisions Sub-Clause 8.5, Page	PC 8.5 - Extension of Time for Completion The Contractor shall be entitled subject to Sub-Clause 20.2 [Claims for Payment and/or EOT] to Extension of	With Reference to PC 8.5 We request you to Reinstate GC clause 8.5	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		(172 / 210)	Time if and to the extent that completion for the purposes of Sub-Clause 10.1 [Taking Over the Works and Sections] is or will be delayed by any of the following causes:		
			a. a Variation (except that there shall be no requirement to comply with Sub- Clause 20.2 [Claims for Payment and/or EOT]);		
			b. a cause of delay giving an entitlement to EOT under a Sub-Clause of these Conditions;		
			When determining each EOT under Sub-Clause 20.2 [Claims for Payment and/or EOT], the Engineer shall review previous determinations under Sub-Clause 3.7 [Agreement or Determination] and may increase, but shall not decrease, the total EOT.		
			If a delay caused by a matter which is the Employer's responsibility is concurrent with a delay caused by a matter which is the Contractor's		



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			responsibility, the Contractor's entitlement to EOT shall be assessed in accordance with the rules and procedures stated in the Special Provisions (if not stated, as appropriate taking due regard of all relevant circumstances).		
			In order for the Engineer to determine the amount of an extension, no later than 28 days after the Contractor gives the notice required by Sub-Clause 8.5, the Contractor shall Submit a "Time Impact Analysis" for adjustment of the Time for Completion. Each Time Impact Analysis shall define the extent of adjustment and the basis thereof in a form acceptable to the Engineer, and include;		
82.	Volume II – Conditions of Contract (GC and	PC Part - B Special Provisions Sub-Clause	PC 8.6 - Delays Caused by Authorities	Request you to provide EOT with Cost + Profit	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	PC)	8.6, Page (173 /210)			
83.	Volume II – Conditions of Contract (GC and PC)	PC Part B – Special Provisions, Sub-Clause 13.6, Page (177/ 210)	PC 13.6 Adjustments for Changes in Laws Any other changes (except on account of sub-paragraphs (a) and/or (b) above) in existing taxes/new taxes (also including any royalties, levies, cess, duties, etc.) on supply of materials/services/works etc. shall not be considered and its impact(s) shall be deemed to be included either in Subclause 13.7 [Adjustments for Changes in Cost] and/or in the Accepted Contract Amount/ Contract Price.	Change in existing taxes/new taxes (also including any royalties, levies, cess, duties, etc.) on supply of materials/ services/works etc. is also not foreseeable by Bidder at this and is not possible to include the same in Contract price. So, request MPMRCL to also include compensation for change in existing taxes/new taxes (also including any royalties, levies, cess, duties, etc.) on supply of materials/services/works etc. made and/or officially published after the Base Date	The Tender Conditions shall prevail.
84.	Volume II – Conditions of Contract (GC and PC)	PC Part B – Special Provisions, Sub-Clause 13.6 Page (177/ 210)	PC 13.6 - Adjustments for Changes in Taxes Subject to the following provisions of this Sub-Clause, the Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in:	We understand that - 1. Change in Taxes will cover changes in taxes / duties for contractor's inputs. 2. In case of supplies or services by consortium member whose scope is not works contract, any change taxes	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			a. any new tax which is imposed on Composite Works Contracts applicable on Metro Project; and b. change in the rate of Goods & Service Tax (GST) and/or Custom Duty on Composite Works Contracts applicable on Metro Project as per GST Act. made and/or officially published after the Base Date, which affect the Contractor in the performance of obligations under the Contract. In this Sub Clause "change in Taxes" means any of the changes under subparagraphs (a) and/or (b) above.	on goods or services will be covered by change in law. Please confirm our understanding.	
85.	Volume II – GC & PC	PC Part B – Special Provisions, Sub-Clause 13.6, Page (177 /210)	PC - 13.6 Adjustments for Changes in Taxes Subject to the following provisions of this Sub-Clause, the Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in: a. any new tax which is imposed on Composite Works Contracts applicable	We understand that - 1. Change in Taxes will cover changes in taxes / duties for contractor's inputs. 2. In case of supplies or services by consortium member whose scope is not works contract, any change taxes on goods or services will be covered by change in law.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			on Metro Project; and b. change in the rate of Goods & Service Tax (GST) and/or Custom Duty on Composite Works Contracts applicable on Metro Project as per GST Act. made and/or officially published after the Base Date, which affect the	Please confirm our understanding.	
86.	VOL-II Condition of Contract (GC & PC)	Particular Condition, Part B, Special Provisions, Clause PC13.6, Page (177 / 210)	PC 13.6 Adjustments for Changes in Taxes Subject to the following provisions of this Sub-Clause, the Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in: a. any new tax which is imposed on Composite Works Contracts applicable on Metro Project; and b. change in the rate of Goods & Service Tax (GST) and/or Custom Duty on Composite Works Contracts applicable on Metro Project as per GST Act.	With Reference to PC 13.6 - We request you to Reinstate GC clause 13.6.	In case of introduction of a New Indirect Tax or introduction of new Cess after the due date of Tender submission, the same shall prevail and the Contractor shall produce the relevant notification issued by the Authorities for reimbursement.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			made and/or officially published after the Base Date, which affect the Contractor in the performance of obligations under the Contract. In this Sub-Clause "change in Taxes" means any of the changes under sub-paragraphs (a) and/or (b) above. If the Contractor incurs an increase in Cost as a result of any change in Taxes, the Contractor shall be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to payment of such Cost, up to the Time for Completion. However, the Contractor shall not be entitled for any increase in Cost as a result of any change in Taxes, if the EOT is granted on account of any Contractor's default. If there is a decrease in Cost as a result of any change in Taxes, the Employer shall be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to a reduction in the Contract Price, up to the Time for		



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			Completion (including all EOT, if any).		
			Any other changes (except on account of sub-paragraphs (a) and/or (b) above) in existing taxes/new taxes (also including any royalties, levies, cess, duties, etc.) on supply of materials/services/works etc. shall not be considered and its impact(s) shall be deemed to be included either in Sub-Clause 13.7 [Adjustments for Changes in Cost] and/or in the Accepted Contract Amount/ Contract Price.		
			If any adjustment to the execution of the Works becomes necessary as a result of any change in Taxes:		
			i. the Contractor shall promptly give a Notice to the Engineer, or		
			ii. the Engineer shall promptly give a Notice to the Contractor		
			(with detailed supporting particulars).		
			Thereafter, the Engineer shall either instruct a Variation under Sub-Clause		



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			13.3.1 [Variation by Instruction] or request a proposal under Sub-Clause 13.3.2 [Variation by Request for Proposal].		
87.	Vol II Conditions of Contract (GC & PC)	PC Part B – Special Provisions, Sub-Clause 13.7 Page (178 / 210)	PC 13.7 - Adjustment for Changes in Cost Replace entire Sub-Clause 13.7 with following: 1. For those items which form part of the permanent works and quoted in Indian Rupees- i. The following Price variation Adjustment will be applicable. a. For Supply Portion Price Adjustment as per notification of Indian Electrical and Electronics Manufacturers' Association (IEEMA) shall apply for supply portion which are given at Annexure-B: IEEMA	Bidder request to revise the Price variation formula for third rail. The provided formula is floating the conductor rail price using the spot rate of aluminium quoted at London Metal Exchange (LME) which is correct. But the spot rate of aluminium in reality only impacts the mass of aluminium that is used to produce the rail. The formula considers that 75% of the rail price is variable following the aluminium spot rate and do not consider that the spot rate will only impact the costs of the mass of aluminium used for the production of the rail and this part of costs compared to the overall costs of the	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Reference	(Page No)	Notifications at the encl. of Volume-VII of Pricing document. These are briefly as under For Cables: 1. Cir. No.: 117/DIV/CAB/05; dated-11th December 2017 2. Cir. No.: 35/DIV/CAB/05; dated-24th April 2018 For LV switchgear & MV switchgear AIS (up to & Including 36KV) 1. Cir. No. 09/DIV/LVSWG/05 dated 20th February 2019 For Power transformers	rail is much lower than 75% of the rail price. The correct LME adjustment for the conductor rail is to apply the variation in LME only on the real mass of aluminium used for the production of the rail and not on the other costs factors that belong to the production of the rail since LME has nothing to do with them. We refer to Kochi Metro Phase 1 Extension Tender No. KAE-04/2020 in which the correct price variation for aluminium in Conductor Rails is used as following and	
			1. Cir. No. 85/DIV/TRF/05; dated-05th June2015 Notes: a. It may please be noted that only latest notifications / circulars shall be considered for price adjustment. b. The above Notifications / Circulars are for reference of the Tenderer and	Rails is used as following and request to change the price variation accordingly: Price Variation for Conductor Rail The price adjustment shall be linked lo spot rate of aluminium quoted at London Metal Exchange (LME), and shall be as under: P1= P0 + M x	



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			these are also available on IEEMA website (www.ieema.org) and as on date, these are the current ones. b. For Erection Portion For erection works at site, the following formula shall be applicable as mentioned below: VI = Adjustment on account of labour component = p x Rx (I- Io) /Io Where, p = Cost Coefficient of Labour to the Total Cost = 0.05 R = Gross value of the work done by the Contractor for the period of work under consideration, after excluding there from the cost of any materials supplied free or at fixed rate to the Contractor. Io= Consumer Price Index for Industrial workers, published by Ministry of Labour & Employment, Govt of India, as applicable to	(LME1 – LME0) M= Mass of aluminium per meter of conductor rail Po= Base price (Contract price) of the Conductor rail (EUR per meter)	



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			Ahmedabad area for the month in which the tender was opened. I = Average of monthly Consumer Price Index for Industrial workers published by Ministry of Labour & Employment, Govt of India, as applicable to Indore area for the period of work under consideration. c. For Conductor Rail (BOQ Item No A.1 of Bill No. IN-6.1 for Indore Metro), which form part of the permanent works and quoted in foreign currency and expected to be supplied from outside the Employer's country as per ITB/BDS 4.17. The price adjustment shall be linked to spot rate of aluminium quoted at London Metal Exchange (LME), and shall be governed by the formula given as under: Price Adjustment= 0.75xAccepted price x[Current Index-Base Index] x f/Base Index Where;		



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			Current Index is the spot rate cost of aluminium as given on the L.M.E. (London Metal Exchange) 28 (twenty-eight) days prior to the date of notification to Engineer / Employer for inspection of material;		
			Base Index is the cost of aluminium as given by the L.M.E. (London Metal Exchange) 28 (twenty-eight) clays prior to the latest date of Tender submission;		
			= Zo I ZI where; Zo is the number of units of the currency of the index which is equivalent to one unit of bid currency as applicable on 28 (twenty-eight) days prior to the latest date of Tender submission; and ZI is the number of units of the currency of the index which is equivalent to one unit of bid currency as applicable on 28 (twenty-eight) days prior to the date of notification for inspection.		



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
88.	Vol II Conditions of Contract (GC & PC)	PC Part B – Special Provisions, Sub-Clause 13.7 Page (179 / 210)	b. For Erection Portion lo= Consumer Price Index for Industrial workers, published by Ministry of Labour & Employment, Govt of India, as applicable to Ahmedabad area for the month in which the tender was opened.	Bidder request MPMRCL to revise the clause as specified below. For Erection Portion lo= Consumer Price Index for Industrial workers, published by Ministry of Labour & Employment, Govt of India, as applicable to Ahmedabad-Indore area for the month in which the tender was opened.	Corrigendum is being issued separately.
89.	Volume II – Conditions of Contract (GC and PC)	PC Part B – Special Provisions, Sub-Clause 13.7 Page (179 / 210)	PC 13.7 - Adjustments for Changes in Cost 1Adjustment of Changes in Cost b. For Erection Portion For erection works at site, the following formula shall be applicable as mentioned below: VI = Adjustment on account of labour component = p x Rx (I- Io) /Io Where, p = Cost Coefficient of Labour to the Total Cost = 0.05	Please note that value of Erection, Installation and Commissioning for the project will never be 5% of Project cost and it is normally in the range of 15-20%. Therefore, bidder requests to amend the clause as follows: 1) If the total Cost (R) equates to Gross value of the work done for Erection/Installation, Testing and Commissioning, p=0.85 2) In case total cost (R) equates to total contract value, request you to modify value of p as under in line with	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			R = Gross value of the work done by the Contractor for the period of work under consideration, after excluding there from the cost of any materials supplied free or at fixed rate to the Contractor. Io= Consumer Price Index for Industrial workers, published by Ministry of Labour & Employment, Govt of India, as applicable to Indore area for the month in which the tender was opened. I = Average of monthly Consumer Price Index for Industrial workers published by Ministry of Labour & Employment, Govt of India, as applicable to Indore area for the period of work under consideration.	the Payment Schedule (i.e. 20% of supply is released upon completion of Erection, installation and commissioning) p = Cost Coefficient of Labour to the Total Cost = 0.2	
90.	Conditions	PC Part B – Special Provisions, Clause 14.1 Page (182 / 210)	PC 14.1 - The Contract Price "the Contractor shall pay all taxes, duties and fees required to be paid by the Contractor under the Contract, and the Contract Price shall not be adjusted for any of these costs, except as stated	Kindly provide clarity on BOCW cess applicability on tender price. As per our understanding BOCW cess @ 1% only on civil portion of the contract, this in conformity with the Hon'ble Supreme Court judgment,	"Pursuant to the Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996, the Contractor shall be liable for BOCW Cess, its



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	& Volume I – NIT, ITT, EQC and LOT	Part - 2 (ITT) Sub Clause 4.2.6.2 Page (24 / 132)	in Sub-Clause 13.6 [Adjustments for Changes in Taxes];" & Vol-I. ITT 4.2.6 - Tenderers must note the following; Tenderers are advised to quote the price inclusive of all central, state, local taxes, duties, levies, cess, GST and all other incidental charges required to fulfil the tender conditions including statutory deduction viz., TDS towards Income Tax, GST, Labour cess etc., after considering clause 4.2.4, 4.2.5, 4.2.6 above.	vide SLP (C) No. 8630 of 2020 in the matter of UTTAR PRADESH POWER TRANSMISSION CORPORATION LTD. order dt. 12th May 2021. As per BOCW law in government contract, employer needs to be recovered and deposited hence clarity required. In the recent DMRC DE-04 tender, DMRC confirmed 15% contract value will be considered as Civil contract and 1% BOCW shall be deducted on the 15% of contract value. Request your acceptance on the same BOCW on the Civil portion of contract.	applicability and the Contract Price shall be deemed inclusive of BOCW Cess. In case the contractor considers that the BOCW Cess shall not be applicable partially or fully (for portions of supply, services and/ or both, as the case may be), then the Employer shall levy and deposit BOCW Cess accordingly, subject to submission of appropriate undertaking/ certificate by the Contractor. The Contractor shall indemnify and hold harmless the Employer against and from all claims arising out of or in this regard."
91.	Volume II –	PC Part B -	PC 14.1 - The Contract Price	We understand that	The Contractor need to



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Conditions of Contract (GC and PC)	Special Provisions, Sub-Clause 14.1 Page (182 / 210)	The Contractor shall be solely responsible to find out and ascertain whether the Works or any part thereof will qualify and be eligible for the concessional duty benefits under Chapter 98.01 of Custom Tariff Act for project Imports. The Contractor shall also ascertain the applicability of Custom Duty and any other taxes, duties cess, etc. and inclusion of the same in their quoted price. After award of the Contract, the Employer at the written request of a Contractor shall facilitate for obtaining sponsoring/ recommendation letter from the Ministry of Housing and Urban Affairs (MoHUA) for getting themselves registered for availing Project Import benefits. However, the responsibility to avail the concessional benefits under Project Import or otherwise as extended in accordance with the law of the land shall solely rest with the	Employer will provide necessary documents for availing concessional duty benefits under Chapter 98.01 of Customs Tariff Act in the name of contractors and sub-contractors for the imports by contractor and sub-contractors under project imports. Please confirm our understanding.	process for Project Import Benefits, the Employer will facilitate with recommendations and sponsorship letter. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			Contractor.		
92.	Volume II – Conditions of Contract (GC and PC)	PC Part B – Special Provisions, Sub-Clause 14.1 Page (182 of 210)	PC 14.1 The Contract Price The Contractor shall be solely responsible to find out and ascertain whether the Works or any part thereof will qualify and be eligible for the concessional duty benefits under Chapter 98.01 of Custom Tariff Act for project Imports. The Contractor shall also ascertain the applicability of Custom Duty and any other taxes, duties cess, etc. and inclusion of the same in their quoted price. After award of the Contract, the Employer at the written request of a Contractor shall facilitate for obtaining sponsoring/ recommendation letter from the Ministry of Housing and Urban Affairs (MoHUA) for getting themselves registered for availing project import benefits. However the, responsibility to avail the concessional benefit under project import or otherwise as extended in accordance with the law of the land	We understand that Employer will provide necessary documents for availing concessional duty benefits under Chapter 98.01 of Customs Tariff Act in the name of contractors and sub-contractors for the imports by contractor and sub- contractors under project imports Please confirm our understanding.	The Contractor need to process for Project Import Benefits, the Employer will facilitate with recommendations and sponsorship letter. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			shall solely rest with the contractor.		
93.	Volume II – Conditions of Contract (GC and PC)	PC Part B – Special Provisions, Sub-Clause 14.2.3 Page (183 / 210)	PC 14.2.3 - Repayment of Advance Payment Replace entire Sub Clause 14.2.3 (b) with following: (b) deductions shall be made at the amortisation rate of twenty percentage (20%) of the amount of each IPC (excluding the advance payment and deductions and release of retention moneys) in the currencies and proportions of the advance payment, until such time as the advance payment has been repaid. However, the recovery of mobilisation and /or any other advances will be completed before eighty five percent (85%) of the Contract Price has been paid or by the time of original Completion Date (including EOT granted pursuant to Sub-clause 8.5 [Extension of Time]), whichever is earlier and the whole of the balance then outstanding shall	Kindly consider the below terms for recovery of Advances for better Cash flow for the Contractor. The recovery of Advances shall commence when 25% of the original contract value of the work has been paid and it will be completed by the time 85% of the Contract Value has been paid or the original completion date whichever is earlier. As far as possible the recovery of advances shall be limited to 15% of an account bill	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			immediately become due and payable by the Contractor to the Employer. Add following at the end of Sub Clause 14.2.3		
94.	Volume II – Conditions of Contract (GC and PC)	PC Part - B Special Provisions Sub-Clause 14.8, Page (185 / 210)	PC 14.8 - Delayed Payment If the Contractor does not receive payment in accordance with Sub-Clause 14.7 [Payment], the Contractor shall not be entitled to receive any financing charges.	With Reference to PC 14.8 - We request you to Reinstate GC clause 14.8 and provide details of financing charges against delayed payment.	The Tender Conditions shall prevail.
95.	Volume II – Conditions of Contract (GC and PC)	PC Part B – Special Provisions, Sub-Clause 14.8, Page (185 / 210)	PC 14.8 Delayed Payment Replace entire Sub Clause 14.8 with following: If the Contractor does not receive payment in accordance with Sub- Clause 14.7 [Payment], the Contractor shall not be entitled to receive any financing charges.	Request MPMRCL to reinstate the GC 14.8 clause for Delays' Payment	The Tender Conditions shall prevail.
96.	Volume II – Conditions of Contract	PC Part - B Special Provisions	PC 18.5 - Optional Termination Optional Termination- deleted	Kindly reinstate the original clause	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	(GC and PC)	Sub-Clause 18.5, Page (186 /210)	18.5 (d) and €		
97.	Volume II – Conditions of Contract (GC and PC)	PC Part B – Special Provisions, Sub-Clause 16.1, Page (186 / 210)	PC 16.1 - Suspension by Contractor Replace Sub-Clause 16.1 (b) with following: [Not Used]	Request MPMRCL to reinstate the GC 16.1 clause for Suspension by Contractor	The Tender Conditions shall prevail.
98.	Volume II – Conditions of Contract (GC and PC)	PC Part B – Special Provisions, Sub-Clause 18.4, Page (186 / 210)	PC 18.4 - Consequences of an Exceptional Event Replace entire Sub-Clause 18.4 with following: "If the Contractor is the affected Party and suffers delay and/or incurs Cost by reason of the Exceptional Event of which he/she gave a Notice under Sub-Clause 18.2 [Notice of an Exceptional Event], the Contractor shall be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to reasonable EOT and no monetary claims whatsoever shall be paid to entertained	Request MPMRCL to reinstate the GC 18.4 subclause for Exceptional Event	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			on this account		
99.	Conditions	PC Part B – Special Provisions, Sub-Clause 18.4 Page (186 / 210)	PC 18.4 - Consequences of an Exceptional Event "If the Contractor is the affected Party and suffers delay and/or incurs Cost by reason of the Exceptional Event of which to reasonable EOT and no monetary claims whatsoever shall be paid or entertained on this account."	In Case of Exceptional Events, we request to allow for monetary claims arising due to Idle resources/Overhead Charges and delay in the execution due to the reasons not attributed due to contractor. Request to accept the same.	Corrigendum is being issued separately.
100.	Volume II – Conditions of Contract (GC and PC)	General		Kindly clarify the rate of GST applicable for this project i.e whether 12% or 18%.	The Bidder may verify from the concerned authority. The Tender Conditions shall prevail.
101.	Volume II – Conditions of Contract (GC and PC)	General		Kindly confirm whether that the Essential certificate (Notification No. 84/97- Customs) shall be made available for this project because of foreign funding so as to the bidder can avail the Custom duty exemption for the imported items.	The Contractor need to process for Project Import Benefits, the Employer will facilitate with recommendations and sponsorship letter.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
					The Tender Conditions shall prevail.
102.	Volume II – Conditions of Contract (GC and PC)	General		Kindly clarify whether is there any requirement for supplying major DC system equipment from one supplier or part equipment can be procured from various suppliers.	The equipments should meet the technical specifications and be compatible. The Tender Conditions shall prevail.
103.	Volume II – Conditions of Contract (GC and PC)	General		Kindly clarify whether is there any restriction for sourcing the imported items.	Refer Vol-I - ITT Sub-clause 6.5.5, 6.6.2, Annexure – 10 to ITT and Appendix – 29. The Tender Conditions shall prevail.
104.	Volume II – Conditions of Contract (GC and PC)	General		Kindly clarify whether DPIIT clause is applicable in this tender.	Kindly refer to Vol-I, ITT Sub- Clause. 6.5.5 and Sub- Clause 6.6 The Tender Conditions shall prevail.
105.	Volume II – Conditions of Contract	General		Kindly advise if there is any qualification requirement for the suppliers.	Refer Vol-III Chapter 10, Sub-Clause 10.9.3 (d) for service proneness of



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	(GC and PC)				proposed Equipments. The Tender Conditions shall prevail.
106.	Volume III – Employers Requireme nts	Key Personnel (Notes) Sub- Clause 1.3.6. Page (6 / 301)	Category Specialisation Minimum Numbers Minimum Categorium Categorium	Bidder seems that the key staff requirements are enormous and staff's like logistic manager, procurement manager, testing & commissioning in charge are not dedicatedly required. Since these are normally common resources working or multiple projects, bidder requests MPMRCL to remove requirements which will unnecessarily increase project cost.	Positions with single asterisk (*) mark are required continuously on the project site. The deployment schedule of remaining experts shall be decided by the Engineer.
107.	Volume III – Employers Requireme nts	Key Personnel (Notes) Sub- Clause 1.3.6. Page (7 /301)	d. In case of non-deployment of Key Personnel, the penalty shall be imposed at the rate of Rs.2,00,000/- (Rupees two lakh) per month for each Key personnel and deducted from Contractor's interim payment applications. In case of non deployment, for the part of the month,	The Penalty amount is high and is actually double penalty for the bidder. There is already provision for LD for not achieving Key Dates. If bidder doesn't deploy required staff, it will definitely affect achievement of Key Dates, which is not in bidder's interest. It is always bidder's	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			penalty shall be imposed on pro-rata basis. The decision of the Engineer in this regard, shall be final and binding.	endeavour to deploy the required manpower staff's as per work requirement so that Key Dates are met.	
				Therefore, bidder requests MPMRCL to remove the penalty or at least reduce the amount to Rs. 50000/- per month.	
108.	Volume III – Employers Requireme nts	Employers Requirement s 10.9.3 Manufacturin g and Production Management Page (48 / 301)	d. The procurement and Manufacturing Programme shall include the proposals for vendor approval. The contractor is required to submit proposals for vendor approvals for all equipment, assemblies, sub-assemblies, spare parts, M&P and any other item required for the project. Inter alia the details should include design, manufacturing and testing facilities available with the vendor. Quality Assurance Plans adopted by the vendor and his sub- vendors shall also be submitted for employer's review. The	Minor supply materials with requested QR criteria are difficult, since many old suppliers are not manufacturing the same as on date and new suppliers are available with good quality in the market and the major supply items are separately listed in the QR, hence we kindly request you to accept the below changes for the general items: The procurement and Manufacturing Programme shall include the proposals for vendor approval. The contractor is required to submit	Minor supply materials of value less than Rs 50,000 is exempted for submission of QR criteria. Same can be procured readily available from market. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			contractor is also, required to submit the details of turnover of the vendor for last 5 years and turnover in respect of the equipment proposed to be supplied by the vendor.	proposals for vendor approvals for all equipment, assemblies, subassemblies, spare parts, M&P and any other item required for the project. Inter alia the details should include design, manufacturing and testing facilities available with the vendor. Quality Assurance Plans adopted by the vendor and his subvendors shall also be submitted for employer's review. The contractor is also, required to submit the details of turnover of the vendor for last 2 years or more and turnover in respect of the equipment proposed to be supplied by the vendor.	
109.	Volume III – Employers Requireme nts	ER/Clause 16.2-System Assurance Activities Page (74 /301)	16.2.9 The Contractor shall commence the use of the Failure Reporting Analysis and Corrective Action System (FRACAS) prior to any factory or site acceptance tests and report to the Engineer on a monthly basis.	Refer to the scope of work for Tender package no. IN09, all the equipment are bought out material. There will not be a system till the service will start for revenue operation. Thus, the FRACAS implementation would not be started prior to any Factory or site acceptance test. However, all the	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				non-confirmatory of all the equipment will be maintained under the NCR process.	
110.	Volume III – Employers Requireme nts	Sub- Clause18.2.5 Page (83 / 301)	8.2.5 Some of the major utilities which cannot be diverted if decided by utility owning agency, the Contractor shall take into consideration the existence of these utilities and design the foundation at these locations accordingly, if required, the pile cap top level shall be fixed at the bottom of the utilities without any extra cost.	Bidder requests employer to reimburse such amount in actual based on documentary evidence. Since Bidder is also not able to evaluate such concerns from utility owning agency during bid stage.	For such unforeseen situations, Provisional sum is kept in Vol-VII Pricing Document.
111.	Volume-IV - Technical Specificatio n	Chapter - 1 Sub-Clause 1.1.7, Page (2/16)	MPMRCL has engaged a Detailed Design Consultant for the design Works associated with the Power Supply Receiving / Distribution System, 750 V dc Third Rail Traction Electrification and SCADA System. However, the Contractor shall be responsible for validation of design.	We understand that validation of designs, documents will be done contractor, no third party/agency will be involved for validation. Please confirm. Also understand that DDC appointed by MPMRCL will review the designs/documents submitted by Contractor. Please confirm. We understand that validation of	The Employer reserve its right to engage 3rd party / agency for review of designs. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				designs, documents will be done contractor, no third party/agency will be involved for validation. Please confirm.	
				Also understand that DDC appointed by MPMRCL will review the designs/documents submitted by Contractor. Please confirm.	
112.	Volume-IV - Technical Specificatio n	Chapter-1 Sub-Clause 1.1.7 Page (2/16)	MPMRCL has engaged a Detailed Design Consultant for the design Works associated with the Power Supply Receiving / Distribution System, 750 V dc Third Rail Traction Electrification and SCADA System. However, the Contractor shall be responsible for validation of design. It shall be the responsibility of the Contractor: • To satisfy himself that the tentative capacities, ratings and quantities of equipment as specified herein meet the operational requirements. •To verify the ratings, quantities of equipment etc. as specified in this	We understand that any increase in sizes of equipment after verification of simulation study during execution will be treated as Variation Order. Please confirm.	Any major change will be dealt with as per relevant contract condition.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			Specification based on technical inputs provided in the Document.		
113.	Volume-IV - Technical Specificatio n	Chapter-1 Sub-Clause 1.1.7 Page (2/16)	MPMRCL has engaged a Detailed Design Consultant for the design Works associated with the Power Supply Receiving / Distribution System, 750 V dc Third Rail Traction Electrification and SCADA System. However, the Contractor shall be responsible for validation of design.	We understand that it is a BOQ based tender, hence items are to be quoted as per BOQ line item. But there is no BOQ line item for design verification and validation. Hence, please confirm whether it is required to do validation and verification of design, since it is already done by DDC. If design validation is required to be done by the contractor, we request you to include this line item in the BOQ.	The cost towards validation and verification of the designs is deemed to have been included in the price bid. The Tender Conditions shall prevail.
114.	Volume-IV - Technical Specificatio n	Chapter-1 Sub-Clause 1.1.8 Page (3/16)	If the Bidder considers any additional equipment, equipment of higher capacities and higher ratings for the systems and sub-systems or any other additions necessary for the complete, safe and reliable operable power supply system, he shall include such items in his bid, as	We understand that the list of items quoted if any as additional equipment will not be a part of financial evaluation. Kindly confirm	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			additional items, providing all clarifications and justifications for the same.		
115.	Volume-IV - Technical Specificatio n	Chapter-1 Sub-Clause 1.1.8 Page (3/16)	If the Bidder considers any additional equipment, equipment of higher capacities and higher ratings for the systems and sub-systems or any other additions necessary for the complete, safe and reliable operable power supply system, he shall include such items in his bid, as additional items, providing all clarifications and justifications for the same.	Since the bidder is expected to submit a bid based on the bill of quantities and specifications would have been developed by an experienced GC/DDC, It is requested to delete this clause. As per referred clause 1.1.8 of Chapter-1 of Vol. IV, we understand that the contractor shall review the design provided by the employer. However, during the review, if any increase in rating, capacity, quantities of the indicated equipment shall be payable additionally under variation. Please confirm.	Corrigendum is being issued separately.
116.	Volume-IV - Technical Specificatio n	Chapter-1, Sub-Clause 1.2.4 Page (4/16)	Chainage for ramp	Please specify the chainage of the ramp starting point & ending point between the following Elevated & UG stations: a) Gandhi Nagar (Elevated) and	The tentative chainage is as under: a) Gandhi Nagar (Elevated) 14+330 and Airport (UG) 13+827.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				Airport (UG) b) Rajawada palace (UG) and Indore railway station (Elevated) The same is required for estimation of cable brackets at ramp.	b) Rajawada palace (UG) 7+190 and Indore railway station (Elevated) 7+700. The Power Supply & Traction Contractor has to interface with respective designated contractor for final chainage. The Tender Conditions shall prevail.
117.	Volume-IV - Technical Specificatio n	Chapter 1, Sub-Clause 1.4.4.2, Page (9 /16)	Gandhi Nagar RSS shall be Air Insulated Switchgear (AIS) type 132 kV outdoor bays with SF6 breakers and 33 kV indoor cubicle type bays with vacuum switchgears. In view of space constraints at ISBT/MR10 flyover and Khajrana Square, the RSS at these locations, shall be 132kv Gas Insulated Switchgear (GIS) indoor type in addition to 33kv vacuum switchgear indoor type.	Bidder requests Employer to furnish Plot size with co-ordinates, Layout of all 3 RSS and Preliminary Geotechnical Investigation Report.	Plot size along with coordinates shall be provided to the successful bidder. However the bidders are advise to visit the site. Geotechnical Investigation Report- Please refer Clause No 12.18 of Vol-IV Technical Specifications. It is in the scope of the Power Supply & Traction Contractor. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
118.	Volume-IV - Technical Specificatio n	Chapter-1 Sub-Clause 1.4.7.4, Page (12 / 16)	The33kV busbar provides the input to the two transformer feeders. The redundancy is provided at the complete TSS level and the simulation has also been performed considering non-availability of one complete TSS.	Bidder understands that any single unit of rectifier or rectifier transformer failure will result in 12 pulse output from one rectifier set. So, for the same reason, bidder understands that any single unit of rectifier or rectifier transformer failure as whole TSS failure. Please confirm bidders understanding.	The two transformers envisaged by considering extreme emergency conditions. However, in normal scenario one transformer is also capable to take load. Therefore, failure of one rectifier transformer cannot be considered as whole TSS failure for all conditions.
119.	Volume-IV - Technical Specificatio n	Chapter-1 Sub-Clause 1.4.7.4, Page (12 / 16)	The33kV busbar provides the input to the two transformer feeders. The redundancy is provided at the complete TSS level and the simulation has also been performed considering non-availability of one complete TSS.	In continuation to above query, please confirm whether bidder can propose a 12 pulse output voltage system by proposing 2 Nos of Yy0d11 transformers per TSS instead of Y(+7.5 o)y0d11 and Y(-7.5 o)y0d11. This can facilitate the use of healthy rectifier even under any single unit of rectifier or rectifier transformer failure in any TSS.	The Tender Conditions shall prevail.
120.	Volume-IV - Technical	Chapter-1 Sub- Clause	One TSS is to be provided with inverter recuperation system with inverter	We understand that MPMRCL will designate the TSS where inverter is	Corrigendum is being issued separately.



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	Specificatio n	1.4.7.8, Page (12/16) Clause 2.2.5.3	capacity of 1MW One designated TSS shall be provided with inverter recuperation system with inverter capacity of 1MW.	to be installed in the network.	
121.	Volume-IV - Technical Specificatio n	Chapter-1 Sub-Clause 1.4.9.2.2 Page (13/16)	Earth Mats and Earthing System in Depot traction substations shall be provided by Power Supply & Traction Contractor whereas those for TSSs at passenger stations is under the scope of work of civil contractors for the stations. However, providing the overall earthing system schematic for TSS, including interface and coordination with other contractors, shall be under the responsibility of Power Supply & Traction Contractor.	It is requested to please provide the fault level at which earth Mat of TSS and ASS is to be designed.	The fault level shall be as per AC simulation study which will be shared with the contractor.
122.	Volume-IV - Technical Specificatio n	Chapter-1 Sub-Clause 1.4.9.2.5 Page (13/16)	Earth Mats and Earthing Systems in Receiving Substations to be designed as per IEEE 80 and to be provided by the Power Supply & Traction Contractor.	main earth mat, ASS/TSS equipment earthing connection from METs to equipment etc. to be done E&M contractor. Please confirm.	Please Refer Chapter 3 Interfaces Table 3.4 (Item No 11) Vol-IV Technical Specifications



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
					The Tender Condition shall Prevail.
123.	Volume-IV - Technical Specificatio n	Chapter-1, Sub-Clause 1.4.11.1 Page (15/16)	Gandhi Nagar Depot Layout	Please furnish the overall layout for Gandhi nagar Depot by showing the following locations: a) Receiving Substation (RSS) b) Depot ASS c) Depot TSS e) OCC/Workshop	Corrigendum is being issued separately.
124.	Volume-IV - Technical Specificatio n	Chapter-1 Sub-Clause 1.4.11.1 Page (15/16)	This Specification is applicable for the work under the tender for the following: Indore Metro: Yellow Line, & Depot at Gandhi Nagar	1.As per our understanding only 1 No Depot at Gandhi Nagar is in IN09 scope. Kindly confirm. 2.Also, kindly clarify why 2 No RTU is required at Depot as per BoQ item C.5 of bill no: 8.1.	1. Only 1 No Depot at Gandhi Nagar is envisaged for Indore metro rail project. 2. 2 No RTU are required at Depot as per BoQ item C.5 of bill no: 8.1 - One for Depot ASS and Second for OCC ASS. The Tender Conditions shall prevail.
125.	Volume-IV -	Chapter-2	The work to be performed for Yellow	We understand that system studies	The contractor shall validate



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	Technical Specificatio n	Sub-Clause 2.1.2.2 Page (3/25)	Line including Depot shall include but not be limited to	like DC Traction load flow, AC load flow, Power factor study, harmonics study are carried out by the DDC and the same are not in scope of IN09 contractor. Kindly confirm.	the system study and designs carried out by DDC/Traction. The Tender Conditions shall prevail.
126.	Volume-IV - Technical Specificatio n	Chapter-2, Sub-Sub- Clause 2.1.2.2, Page (3 / 25)	Validation of designs provided by the Employer to ensure that tentative capacities, ratings and quantities of equipment indicated in the tenders document meet the operational requirements and suggest modifications if required requirements with objective of having a state of art system.	The tender requires the bidders to validate the sizing/rating specified in the documents through a Simulation study. However, all the input data required for conducting such simulation is not available in the tender documents. We would request you to kindly provide the following inputs as minimum: a) Auxiliary Power of the Rolling Stock b) Tractive Effort vs Speed Curve c) Braking Effort vs Speed Curve d) Line Current Limitation Data (Regulation as per EN-50388) e) Minimum and Maximum Voltage of the Rolling Stock f) Car Weight	The contractor shall interface with RS contractor for required RS parameter as indicated in Table 3.6 Chapter-3 of Vol. IV. The Tender Conditions shall prevail



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
127.	Technical	Chapter-2 Sub-Clause 2.1.2.2 Page (3 to 4/25)	The work to be performed for Yellow Line including Depot shall include but not be limited to:	We understand that the supply, laying, testing and commissioning of 132kV cables including all the accessories are excluded from scope of work. Similarly, for 132kV AIS, the incoming structures like receiving gantry, structures for cable rising and conductors are excluded from scope of work. Kindly confirm.	Corrigendum is being issued separately.
128.	Volume-IV - Technical Specificatio n	Chapter - 2 Sub-Clause 2.1.2, Sub- Clause 2.2.1 Page (3 & 4 /25)	2.1.2: ITEMS OF WORK 2.2.1: 132kV CABLES/ 132 kV Overhead Line	We understand that incoming feeder cable (132kV) along with joints & terminations from Grid S/S (GSS) to the MPMRCL RSS are covered under scope of this contract. Please confirm.	Corrigendum is being issued separately.
129.	Volume-IV - Technical Specificatio n	Chapter-2 , Sub-clause .2.2.1.1 Page (4/25)	132kV CABLES / 132 kV Overhead Line: The power shall be supplied by MPPTCL Power from their Grid substations at 132kV level through 132 kV cables or 132 kV overhead lines.	As per referred clause, 132kV feeders from GSS can be cable connected feeder or overhead line. In this regard, we request MPMRCL to specify the type of connection (RSS wise) - whether cable connected or	At MR10 Flyover RSS and Khajrana RSS, power supply from GSS may be through 132kV cable works tentatively. However the contractor shall properly



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			The contractor shall provide bay for termination of 132 kV cable/ 132 kV overhead lines in the RSS. The contractor shall co-ordinate with MPPTCL for the work. Terminations of the 132 kV cable will be provided by M/s MPPTCL but connecting the cables to the bay along with sheath earthing arrangements in the RSS will be the responsibility of the Power Supply & Traction Contractor. Termination of 132 kV overhead lines is not in the scope of the contractor but he will assist MPPTCL in completing the work in the RSS area.	In case of overhead connection, please clarify how the GIS Incomer bay at RSS shall be connected to outdoor overhead connection. In case of any Line terminal towers are required within the RSS, the same shall be in the scope of MPMRCL. Please confirm whether Bidder's understanding is in order.	interface (Chapter 3- Vol-IV Interfaces) with Power Supply Authority (PSA) in this regard. Any line tower shall be provided by the PSA and to lower the conductor from tower, gantry shall be provided by the contractor.
130.	Volume-IV - Technical Specificatio n	Chapter-2, Sub-Clause 2.2.1.1 Page (4 / 25)	The power shall be supplied by MPPTCL Power from their Grid substations at 132kV level through 132 kV cables or 132 kV overhead lines. The contractor shall provide bay for termination of 132 kV cable/ 132 kV overhead lines in the RSS. The contractor shall co-ordinate with MPPTCL for the work. Terminations of	We understand that, MPPTCL subcontractor will carry out termination and sheath earthing of 132kV Cable at GSS end. Please confirm.	Connecting the cables to the bay along with sheath earthing arrangements in the RSS will be the responsibility of the traction and power supply contractor. The Tender Conditions shall



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			the 132 kV. cable will be provided by M/s MPPTCL but connecting the cables to the bay along with sheath earthing arrangements in the RSS will be the responsibility of the Power Supply & Traction Contractor. Termination of 132 kV overhead lines is not in the scope of the contractor but he will assist MPPTCL in completing the work in the RSS area.		prevail.
131.	Volume-IV - Technical Specificatio n	Chapter-2, Sub-Clause. 2.2.7.1 Page (11/25)	A Back-up control centre with similar facility as described for OCC except for providing large video screen display unit shall be provided at Khajrana Square Station.	Please clarify whether BCC shall be part of Khajrana Square RSS Building (or) it shall be provided at Khajrana Square metro station (or) sperate building need to be provided inside the RSS plot?	Tentative location of BCC shall be at Vijay Nagar Station.
132.	Volume-IV - Technical Specificatio n	Chapter-2 - Sub-Clause 2.3.1.2 Page (15/25)	Table 2.3: TSSs	Please clarify whether 33kV outgoing feeder CB to future traction transformer (in future ASS cum TSS such as High court) need to be provided in present scope?	33kV outgoing feeder CB to future traction transformer shall be provided in the present scope.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
					The Tender Conditions shall prevail.
133.	Volume-IV - Technical Specificatio n	Chapter -2, Sub Clause 2.5.12.3 Page (21/25)	2.5.12.3 The System shall achieve a MTBMA of no less than 7 days for each line	The mentioned clause is not pertaining to the scope of work for the tender package no IN09. thus requested to change the clause to:- "The Each System shall achieve a MTBMA of no less than 7 days for the ring line". Or We request to please provide the bifurcation of the each line w.r.t the scope of work for the tender package no.IN09.	Corrigendum is being issued separately.
134.	Volume-IV - Technical Specificatio n	Chapter-2, Sub-Clause 2.5.12.5 Page (21/25)	2.5.12.5 The Reliability of the System shall be demonstrated by the Contractor in accordance with the processes defined in the Specification.	Refer to the referred clause, Bidder requests to provide the Sub-Clause in Specification where the reliability demonstration process in defined.	Based on OEM recommendation, the contractor shall work out reliability as per the metro rail industry practise and propose to the Engineer for review and approval.
135.	Volume-IV -	Chapter-2	2.5.13.3 The measures for Availability	Since Service affecting failure	The relevant international



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Technical Specificatio n	Sub-Clause 2.5.13.3 Page (22/25)	shall be Mean Time Between Service-Affecting Failures (MTBSAF).	definition for the tender scope is not clear in tender, bidder understands the following: (1) Failure: The inability to perform a required function, the occurrence of unexpected action by the equipment, or the degradation of performance to below the required specifications shall constitute a failure. (2) Relevant Failure: A relevant failure of an item is an independent failure which results in a loss of function of that item caused by the following: * A fault in an equipment or subsystem while operating within its design and environmental specification limits; (3) Non-relevant Failure: Any failure of an item not included in the definition of relevant failure, such as the following: * A failure caused by malfunction of other equipment or sub-system that are not supplied by the Contractor;	standard and metro rail industry practise shall be followed regarding MTBSAF. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				* A failure caused by human error, except as noted in Relevant Failure above; * A failure caused by accidents not associated with the normal operation of the item; * A failure caused by operating the equipment or sub-system outside of design or environmental specification limits; (4) Service Failure: Any relevant failure or combination of relevant failures during revenue service operations which results in disruption of revenue service Please confirm acceptance.	
136.	Volume-IV - Technical Specificatio n	Chapter-2, Sub-Clause 2.5.14.2 Page (22/25)	2.5.14.2.2 The required MTTR shall be achieved for failures of the whole System or any part of the System, whether service affecting or not. 2.5.14.2.3 The following MTTR shall be achieved: 1. 30 minutes for trackside equipment; and	As per bidder experience of track side Equipment, the MTTR target of 30 minutes is not feasible referring to the mentioned details of MTTR in clause 2.5.14.2.2 & 2.5.14.2.4 for 3rd rail system. Further, trackside equipment itself don't have any redundancy so that switchover in 30	MTTR target of 30 minutes is exclusive of access time and preparation time. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			2.5.14.2.4 The MTTR time measurement shall include on site diagnostics and rectification of the failure (including software re-boot) up to the point that the System is restored to full functionality. In the event that the failure cannot be rectified, the measurement shall include the time necessary to remove the failed piece of equipment from the System and replace it with a functioning module.	minutes cannot be considered hypothetically. Thus, bidder requests to delete this requirement. As per the bidder's experience from similar projects, bidder requests to accept MTTR targets as 180 minutes for trackside equipment.	
137.	Volume-IV - Technical Specificatio n	Chaper-2, Sub-Clause 2.5.14.2.3 Page (22/25) Chapter-12 Sub Clause 12.19.4.3 Page (159/203)	2.5.14.2.3 The following MTTR shall be achieved: *Point 2: 15 minutes for equipment located in equipment rooms or control rooms & 12.19.4.3 Maintainability This criteria represents the mean time for repairing (MTTR) and shall be considered only for replacement of mal functions or sub assembly failures. The MTTR shall not exceed 2 hours (not	Please refer to the mentioned details of MTTR in clause 2.5.14.2.2 & 2.5.14.2.4 of the same document. As per our experience, the 15 minutes MTTR for equipment located in equipment rooms or control rooms are quite stringent. Further, the mentioned clause is contradicting with the Chapter 12 clause no. 12.19.4.3 referred here. Request you to please modify the clause as:	MTTR target of 15 minutes is exclusive of access time and preparation time. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			including the dead time to reach the site), 48 hrs for distant agency or 12 hrs for Indore based agency	"240 minutes reach", which is a bare minimum requirement for equipment located in equipment rooms or control rooms referring to the specification under the Tender No. IN09. Please confirm acceptance.	
138.	Volume-IV - Technical Specificatio n	Chapter-3 - Sub-Clause 3.2.2 Page (4/55)	Table 3.1: Interfacing Requirements with PSA Traction and Power Supply Contractor: Shall co-ordinate with PSA for path for laying cable inside MPMRCL RSS substation. PSA: Shall supply, lay and install cables.	Please clarify whether cable trench inside the RSS for EHV cable between GSS and RSS are under this contract. If yes, Please clarify the following: a) Whether cable shall be directly buried or laid in RCC trench inside the RSS. b) If direct buried, please furnish the typical cable trench cross section drawing c) Cables are laid in trefoil formation or Flat formation?	The contractor shall interface with PSA for 132kV cable trench details. The Tender Conditions shall prevail.
139.	Volume-IV - Technical Specificatio	Chapter-3 - Sub-Clause 3.2.2	Table 3.1: Interfacing Requirements with PSA Optical fibre cable between GSS to	We understand that optical fibre cable between GSS & RSS shall be provided by PSA along with EHV	Optical fibre cable between GSS & RSS shall be provided by PSA for line



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	n	Page (4/55)	RSS for line differential protection & data exchange	cable for line differential protection & data exchange. Please confirm.	differential protection & data exchange. The Tender Conditions shall prevail.
140.	Volume-IV - Technical Specificatio n	Chapter-3 - Sub-Clause 3.2.2 Page (4/55)	Table 3.1: Interfacing Requirements with PSA	We understand that Main & Check meters at RSS end (132kV Incomer feeder) will be provided by Traction and Power supply contractor, and Check meters at Grid Substation will be provided by PSA. Please confirm.	Main & Check meters at RSS end (132kV Incomer feeder) will be provided by Power supply & Traction contractor. Check meters at GSS will be provided by PSA. The Tender Conditions shall prevail.
141.	Volume-IV - Technical Specificatio n	Chapter-3 - Sub-Clause 3.2.2 Page (4/55)	Table 3.1: Interfacing Requirements with PSA 3. Protection of feeders c. Shall also supply and install C&R Panels and relays, at PSA end (if required) with the approval of PSA.	Bidder requests to provide specifications of C&R Panel with no. of bays required at PSA end and include the same in BOQ/Price Schedule.	The contractor shall interface properly with PSA for required details. The Tender Conditions shall prevail.
142.	Volume-IV - Technical Specificatio	Chapter-3 - Sub-Clause 3.2.2	Table 3.1: Interfacing Requirements with PSA, Item No 3 - Protection of feeders. Traction and Power Supply Contractor:	As per interface, it is not clear that whether loose supply of differential protection & over current protection relay (or) Complete New control &	Traction and Power Supply Contractor shall interface with PSA. Bid price of relevant item is deemed to cover



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	n	Page (4/55)	b. Shall provide and install protection relays such as differential protection, over current protection with the approval of PSA c. Shall also supply and install C & R Panels and relays, at PSA end (if required) with the approval of PSA.	relay panel need to be provided at GSS end feeder. In this regard, we request MPMRCL to specify the clear protection requirement for each GSS end and include suitable line items in the BoQ. Further, we wish to propose only loose supply of line differential relay at GSS end as same make & model no. is required for line differential protection at both ends.	these items as well. The Tender Conditions shall prevail.
143.	Volume-IV - Technical Specificatio n	Chapter-3 - Sub-Clause 3.2.2 Page (5/55)	Table 3.1: Interfacing Requirements with PSA 5. Data exchange b. Shall co-ordinate with PSA and install RTU (if required) at the designated location in PSA substation for exchange of data.	Bidder requests+E28 to provide specifications of RTU required at PSA end and include the same in BOQ/Price Schedule.	The contractor shall interface properly with PSA for required details. The Tender Conditions shall prevail.
144.	Volume-IV - Technical Specificatio	Chapter-3 - Sub-Clause 3.2.2	Table 3.1: Interfacing Requirements with PSA, Item No. 5 - Data exchange	As per referred interface, RTU (If required) shall be provided at GSS end. In this regard, please add a	RTU (if required) at GSS will be provided by Power Supply & Traction Contractor under



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	n	Page (5/55)	Traction and Power Supply Contractor - b. Shall co-ordinate with PSA and install RTU (if required) at the designated location in PSA substation for exchange of data.	separate line item in the BoQ for the GSS end RTU (if required).	relevant line item in the BOQ as quantity variation. The Tender Conditions shall prevail.
145.	Volume-IV - Technical Specificatio n	Chapter-3 -, Sub-clause 3.2.3 Page (6/55)	Table 3.2: Interfacing Requirements with Viaduct Contractor(s) Item No. 1 - Installation of 33 KV, 750 V cables, return cables, control cables, intercropping cables, OFC cables and other cables on the viaduct Traction and Power Supply Contractor - Shall supply & install 33 KV, 750 V cables, return cables and any other cable on/in/under the viaduct including cable support infrastructure (trays, brackets, clamps, etc.)	a) As per referred clause, cable support infrastructure shall be provided by Traction and Power Supply Contractor at Viaduct. In this regard, we shall provide cable brackets only as per earlier all there metro. Trays are not envisaged at viaduct. Please confirm. b) Please clarify whether cable brackets are required at Ramp portion also between Elevated & Underground station? c) Please clarify whether cable brackets are required from Ramp inside the depot which shall be connecting to main line. If yes, please specify the length of ramp inside the	Metallic cable bracket support for 33 kV cable and associated control cable shall be provided on viaduct and ramp portion (between Elevated & Underground station) as well ramp between mainline and Depot by the contractor. Refer Explanatory Note to BOQ for Bill no. IN-2.1, item no. A.1.1, A.2.1, A.3.1. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				depot. d) There is no line item in the price schedule for the cable brackets at viaduct. In this regard, please check and clarify where cable brackets at viaduct need to be quoted in price schedule. Other wise, kindly add separate line item in the BoQ.	
146.	Volume-IV - Technical Specificatio n	Chapter-3 - Sub-Clause 3.2.4 Page (9/55)	Table 3.3: Interfacing Requirements with Track Work Contractor No.	Kindly introduce a line item for costing of exothermic welding in BoQ.	The exothermic welding item is deemed to be included in erection schedule of negative DC cable. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			and power supply Contractor. However, Track Contractor shall supervise the welding process.		
147.	Volume-IV - Technical Specificatio n	Chapter-3 - Sub-Clause 3.2.4 Page (9/55)	Table 3.3: Interfacing Requirements with Track Work Contractor	Return current connections and cross bonding with Track, both exothermic welding and bolted connection have been specified. Please confirm which method will be followed during installation.	Corrigendum is being issued separately.
148.	Volume-IV - Technical Specificatio n	Chapter-3 Sub-Clause 3.2.4 Page (10/ 55)	Table 3.3: Interfacing Requirements with Track Work Contractor 2 (b.) Shall provide jigs and fixtures required for fixing the dowels correctly to track contractor	The quantity of Dowel casting jigs is not provided in the tender BOQ. Request to provide the same.	Corrigendum is being issued separately.
149.	Volume-IV - Technical Specificatio n	Chapter-3 Sub-Clause 3.2.4 Page (12/ 55)	Table 3.3: Interfacing Requirements with Track Work Contractor 9 (d.) Shall engage specialist to perform the rail resistance measurement as well as the track to structure conductance measurement as given in EN 50122-2-2010.	Bidder requests to include 'conductance test measurement for a fully welded section' in BOQ/Price schedule. Please Confirm.	Refer Explanatory note to BOQ of Bill no IN-8.1 item no A.10. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
150.	Volume-IV - Technical Specificatio n	Chapter-3 Sub-Clause 3.2.4 Page (12/ 55)	Table 3.3: Interfacing Requirements with Track Work Contractor 9 (d.) Shall engage specialist to perform the rail resistance measurement as well as the track to structure conductance measurement as given in EN 50122-2-2010.	In order to verify and ensure that track contractor installed rail fasteners and insulation system properly, track contractor shall perform track insulation test for unwelded portion as per test procedure developed by traction power supply contractor. Please confirm.	The Tender Conditions shall prevail.
151.	Volume-IV - Technical Specificatio n	Chapter - 3 Sub-Clause 3.2.5, Page (14/55)	Table 3.4: Interfacing Requirements with Elevated / At-Grade Station building Contractor.	We understand that Busduct will be provided by Traction and Power supply contractor from Transformer to MDB. Any material require for connection between Busduct and MDB i.e. copper busbar, copper flexible jumper, nuts & bolts etc. will be provided by E&M contractor. Please confirm.	The bus duct and other associated accessories etc. shall be provided by the Traction and Power Supply contractor. The Tender Conditions shall prevail.
152.	Volume-IV - Technical Specificatio n	Chapter-3 - Sub-Clause 3.2.5 Page (14/55)	Table 3.4: Interfacing Requirements with Elevated / At-Grade Station Building Contractor, Item No. 1	As per referred interface, we understand that cable path (duct, metallic brackets, cable trays etc.) inside the ASS and ASS cum TSS room shall be provided by Station	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			Station Building Contractor: Construction: a. Shall design & provide and install cable path (duct, metallic brackets, cable trays etc.) as per requirement	Building Contractor. However, as per Chapter-2, Sub-Clause 2.2.4.3, SI No. i) - Cable containment with in substation shall be covered under this contracts. In this regard, please check and confirm the requirement of cable path (duct, metallic brackets, cable trays etc.) inside the ASS and ASS cum TSS room.	
153.	Volume-IV - Technical Specificatio n	Chapter-3 - Sub-Clause 3.2.5 Page (14/55)	Table 3.4: Interfacing Requirements with Elevated / At-Grade Station Building Contractor Installation of Cable Trays in ASS & TSS	We understand the Supply and laying of cable trays in ASS/TSS is in scope of Station building contractor. Kindly confirm	Please refer Table 3.4 Chapter 3 Interfaces of Vol-IV Technical Specifications. The Tender Conditions shall prevail.
154.	Volume-IV - Technical Specificatio n	Chapter-3 - Sub-Clause 3.2.5 Page (14/55)	Table 3.4: Interfacing Requirements with Elevated / At-Grade Station Building Contractor Connection (cable / bus duct) from	Supply and installation of LV bus duct is generally in scope of Station building contractor. Request for you review and suitable amendment.	Please refer Item No 7 Table 3.4 of Chapter 3 Interfaces Vol-IV Technical Specifications. The Tender Conditions shall



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			Transformer to MDB		prevail.
155.	Volume-IV - Technical Specificatio n	Chapter-3 - Sub-Clause 3.2.6 Page (22/55)	Table 3.5: Interfacing Requirements with Depot Contractor(s) Installation of Cable Trays in Depot ASS, TSS and RSS	We understand the Supply and laying of cable trays shall be in scope of Depot contractor for each RSS. Kindly confirm.	Please refer Table 3.5 (Item No 4) Chapter 3 Interfaces of Vol-IV Technical Specifications. The Tender Conditions shall prevail.
156.	Volume-IV - Technical Specificatio n	Chapter-3 Sub-Clause 3.2.8 Page (37 of 55)	Table 3.7: Interfacing Requirements with Signalling and Train Control Contractor. Item No. 7. EMC study:	Bidder requests to include EMC study in BOQ/Price schedule. Please Confirm.	Design validation is in the scope of the contractor.
157.	Volume-IV - Technical Specificatio n	Chapter 3 Sub-clause 3.2.9.2 Page (40/55)	Table 3.8: Interfacing with Telecom Contractor. 7. Provision of CCTV for full coverage in all the locations of RSSs, TSSs & ASS ASSs, and SCADA room etc. Scada room etc. Scada room etc.	We understand that CCTV shall be provided by telecom contractor and the scope of IN09 SCADA contractor confines to interfacing for location of the CCTVs. Kindly confirm.	Please refer Item No 7 of Table 3.8 Chapter 3 Interfaces of Vol-IV Technical Specifications. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
158.	Volume-IV - Technical Specificatio n	Chapter-3 - Sub-Clause 3.2.9.2 Page (40/55)	Table: 3.8: Interfacing with Telecom Contractor, Item No. 2	Control & Monitoring data exchange Traction and Power Supply Contractor: Will supply and install suitable copper cables for connection from RTU to optic fibre converter at each station telecom equipment room (from ASS, Traction Switching Stations The station nearest to RSS, for connection from the RSS)	The Tender Conditions shall prevail.
159.	Volume-IV - Technical Specificatio n	Chapter-3 - Sub-Clause 3.2.9.2 Page (40/55)	Table: 3.8: Interfacing with Telecom Contractor, Item No. 2 Control & Monitoring data exchange: Traction and Power Supply Contractor Will supply and install suitable copper cables for connection from RTU to optic fibre converter at each station telecom equipment room (from ASS, Traction Switching Stations, The station nearest to RSS, for connection from the RSS)	At RSS, all the necessary signals shall be made available up to the RTU. Further, communication to the Telecom equipment/OCC/ODF as shown in the referred drawing (Tender drawing - GENERAL RTU SCHEMATIC - I202-BIG-TRP-00-DWG-SCDSCH1-00602) shall be in other contractor scope. Please confirm	The Tender Conditions shall prevail.
160.	Volume-IV - Technical	Chapter-3 - Sub-Clause	Table 3.9: Interfacing with UG Stations & Tunnel Contractor.	We understand the Supply and laying of cable trays in ASS/TSS is in scope	Please refer Table 3.9(Item No 1 and Item no. 4) Chapter



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specificatio n	3.2.10 Page (44/55)	Item No. 4: Installation of Cable Trays in ASS & TSS	of UG Station & tunnel contractor. Kindly confirm	3 Interfaces of Vol-IV Technical Specifications. The Tender Conditions shall prevail.
161.	Volume-IV - Technical Specificatio n	Chapter-5, Sub Clause 5.2.1 Page (2/7)	5.2.1 Accommodation for the Engineer shall consist of the Principal Office and 2 Number of site offices to be constructed/hired by the Contractor. The locations shall be near to the Works Area and shall be approved by the Engineer.	Bidder understand that employer will provide the hindrance free land for the construction of contractor's office, engineer's principal office and engineer's site offices.	Please refer chapter-4, sub clause 4.3.3 of Vol-V. However, the Employer may consider providing space in the depot (if available) up to 300 Sqm for contractor's temporary site office on applicable charges. The Tender Conditions shall prevail.
162.	Volume-IV - Technical Specificatio n	Chapter-5, Sub Clause 5.2.1 Page (2/7)	5.2.1 Accommodation for the Engineer shall consist of the Principal Office and 2 Number of site offices to be constructed/hired by the Contractor. The locations shall be near to the Works Area and shall be approved by the Engineer.	Bidder understand that three nos. of offices (principal office and site offices) are required as per clause. Kindly confirm if there's the requirement of three nos. of satellite offices (50 sqm). Kindly confirm the space and facilities required for site	Please refer chapter-4, sub clause 4.3.3 of Vol-V. However, the Employer may consider providing space in the depot (if available) up to 300 Sqm for contractor's temporary site office on applicable charges.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				office.	The Tender Conditions shall prevail.
163.	Volume-IV - Technical Specificatio n	Chapter 6, Sub-Clause 6.6.4 Page (6 / 11)	WORKS AREA: An area of appropriate size to accommodate the storage of traction equipment's and offices shall be arranged by the contractor at their own cost at convenient locations. In addition, the Contractor may be permitted as per availability, to use the RSS sites for storage of materials, equipment's etc., and also for a small site office, till the time RSSs are ready for commissioning.	Bidder requests Employer to provide Land for Office accommodation and storage of materials free of cost along with its tentative location.	Please refer chapter-4, sub clause 4.3.3 of Vol-V. However, the Employer may consider providing space in the depot (if available) up to 300sqm for contractor's temporary site office on applicable charges. The Tender Conditions shall prevail.
164.	Volume-IV - Technical Specificatio n	Chapter 6, Sub- Clause.6.10. 5.1.1, Page (9 / 11)	Cable Installation All cables shall be installed as per the ducting cable route plans shown in the Employer's drawings.	Bidder requests Employer to share Cable Routing Plan Drawing from respective RSS to ASS	The bidder is advised to visit site, carry out survey for the said section. The Contractor will propose cable routing plan from respective RSS to ASS for review and approval of the Engineer. The decision would be final and binding.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
165.	Volume-IV - Technical Specificatio n	Chapter 9, Sub-Clause. 9.1.2 Page. (2 /25)	This list has been developed on the basis of past experiences. However, the list is not exhaustive. On the basis of manufacturer recommendations and past experience, the bidder may specify additional tools and spares required for proper handling, operating and maintaining the system for five years. The bidder may also specify the cost for these additional tools and spares in the bid.	Different requirements are mentioned in the referred clauses. Please confirm that cost of supplying spare parts shall include spares as listed in the Chapter 9 of TS Vol-IV of Work's Requirements for Stage-1 only.	Refer Item No F-1, Spares of bill no. IN-9.1 Vol VII-Pricing Document. The Tender Conditions shall prevail.
166.	Volume-IV - Technical Specificatio n	Chapter 9, Sub-Clause. 9.2.5 Page. (3/ 25)	9.2.5 The Spare Parts shall be adequate to meet the maintenance requirement for five years. If, however, the Tenderer feels that some more items or more quantities of the items mentioned herein are required for the proper operation and maintenance of the installations supplied and erected by him, for a period of at least 2 years commencing from the expiry of the Defects Notification Period, the Tenderer shall, in that case, add such items and/or quantities to this list and	Different requirements are mentioned in the referred clauses. Please confirm that cost of supplying spare parts shall include spares as listed in the Chapter 9 of TS Vol-IV of Work's Requirements for Stage-1 only.	Refer Item No F-1, Spares of bill no. IN-9.1 Vol VII-Pricing Document. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			shall include the amended list in his bid.		
167.	Technical	Chapter-9, Sub-Clause 9.2.1 Page (2/25) and Item NoF-1 of bill no. IN- 91, Vol-VII	The price under this item shall include the cost of supplying spare parts, as listed in the Chapter 9 of TS Vol-IV of Work's Requirements for Stage-1. o If however the Tenderer feels that some more items or more quantities are required for the proper operation and maintenance of the installations supplied and erected by him, for a period of at least 5 years commencing from the expiry of the defect liability period, the Tenderer shall in that case include such items and quantities in his bid and quote them in this very item. All conductor supplied as spare shall be in robust steel drums.	Different requirements are mentioned in the referred clauses. Please confirm that cost of supplying spare parts shall include spares as listed in the Chapter 9 of TS Vol-IV of Work's Requirements for Stage-1 only.	Refer Item No F-1 of bill no. IN-9.1 Vol VII-Pricing Document. The Tender Conditions shall prevail.
168.	Volume-IV - Technical Specificatio n	Chapter-9 - Sub-Clause. 9.2.5 Page (3/25)	SPARES, SPECIAL TOOLS, TESTING AND DIAGNOSTIC EQUIPMENT AND MEASURING INSTRUMENTS, Table 9.1: Contract Spares, Page 17 of 25	 a) We understand that referred spare item is applicable for 132kV GIS cable termination kit. b) 132kV power cable shall be single core type. Hence, we understand that 1 set of GIS termination kit means 3 	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			GIS Equipment's SI No. 1 - GIS Termination Kits set for Three Cores of one cables	nos. of single core cable GIS termination kit. Please confirm whether bidder's understanding is in order.	
169.	Volume-IV - Technical Specificatio n	Chapter-9 - Sub-Clause. 9.2.5 Page (5/25)	Table 9.1 : Contract Spares 33kV Equipment	For spares listed under 33kV equipment, we understand Stage 3 items are pertaining to 33kV GIS. Kindly Confirm.	Refer Item No F-1, Spares of bill no. IN-9.1 Vol VII-Pricing Document. The Tender Conditions shall prevail.
170.	Volume-IV - Technical Specificatio n	Chapter-9 - Sub-Clause. 9.2.5 Page (5/25)	Table 9.1 : Contract Spares 33kV Equipment	As per SLD and 33kV AIS specification surge arrestors are not applicable and hence Surge arrestor in spare is not applicable. Kindly Confirm	Generally, Surge arrestor at 33 kV level is part of the dry type transformer. The Tender Conditions shall prevail.
171.	Volume-IV - Technical Specificatio n	Chapter-9 - Sub-Clause. 9.2.5 Page (5/25)	Table 9.1 : Contract Spares 33kV Equipment	As per SLD and 33kV AIS specification surge arrestors are not applicable and hence Surge arrestor in spare is not applicable. Kindly confirm.	The Tender Conditions shall prevail.
172.	Volume-IV -	Chapter-12	Outdoor illumination level in the	Indoor illumination details like control	Corrigendum is being issued



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Technical Specificatio n	Sub-Clause .12.1.2.5 Page (2/203)	Receiving Substation yard area shall be in accordance with the relevant Indian Standard	room and GIS area is not mentioned in the specification. Is Contractor allowed to provide illumination details in those area as per respective Indian standard/ CBIP Manual.	separately.
173.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause .12.1.3.2.2 Page (3/203) 12.1.3.3.2 Page (4/203)	ix. SF6 to Air bushings with complete incoming feeder bay module. g. SF6 to Air bushings and Accessories with GIS	Bidder understand that, 132kV SF6 to Air bushings are not applicable since all incoming and outgoings are envisaged through 132kV Cables as per tender drawings. Please confirm.	Corrigendum is being issued separately.
174.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.1.3 Page (3/203) Sub-Clause 12.21.1 Page (181/203)	132 kV HIGH VOLTAGE BAYS (AIS and GIS) 132kV Gas Insulated Switchgear(GIS)	132kV GIS bay configuration is mentioned in the referred specification clauses and are contradicting with each other. In this regard, we understand that Sub-Clause 12.1.3 shall be referred for 132kV AIS bay configuration only and Sub-Clause 12.21.1 shall be referred for 132kV GIS bays configuration. Please confirm whether bidder's understanding is in order.	Sub-Clause 12.1.3 (AIS and GIS) describes the 132 kV high voltage bays requirement for both AIS and GIS. Sub-Clause 12.21.1 describes the scope of work of 132kV Gas Insulated Switchgear (GIS)



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
					The Tender Conditions shall prevail.
175.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.1.3.2.2 Page (3/203) Sub-Clause 12.21.1.2 Page (182/203)	Each incoming section of GIS bay shall consist of: iii. Two bus bar disconnectors with grounding switch, Each incomer Bay (2 Nos.) consisting of; • Bus Disconnector Switch- 2 Nos. • Bus end Maintenance earth Switch-1 No. TYPICAL SLD FOR 132 KV RSS - GIS TYPE WITH PROTECTION (SHEET 2 OF 2)	As per Sub-Clause 12.21.1.2 & Refereed SLD- Bus end Maintenance earth Switch shall be one number of each Incomer & Outgoing bay. However, as per Sub-Clause 12.1.3.2.2, 2 nos. of Busbar side grounding switch shall be provided. In this regard, we understand that 132kV GIS bay configuration shall be followed as per Sub-Clause 12.21.1.2. Please confirm.	There is no contradiction between referred clauses. The Tender Conditions shall prevail.
176.	Volume-IV - Technical Specificatio n	Chapter-12, Sub-Clause 12.3.3 Page (21/203)	Type Test: The transformers should be Type Tested as per IS 2026 or IEC 60076 in conjunction with their relevant Part. Necessary test documents of previously tested similar transformer within last 5 years from date of NIT shall have to be	We request MPMRCL to accept the type test reports of similar or higher rating transformer for which the test has been conducted in last 10 years from the date of tender opening, instead of 5 years from date of NIT. Please confirm.	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			submitted at the time of Vendor approval.		
177.	Volume-IV - Technical Specificatio n	Chapter-12, Sub-Clause 12.3.3 Page (21/203) Cluase No. 12.3.19 Page (48/203)	b. Dynamic Effect of Short Circuit: Bidders shall submit the valid type test for Dynamic Effect of Short Circuit at the time of vendor approval The short circuit test is not required to be performed if it has been conducted on the same type of transformer in the last 5 years and manufactured in the same factory. By same type it means 132kV/33 kV transformer and similar MVA rating and technical specifications. In case short Circuit Test is conducted than the transformer on which this test has been conducted will not be accepted for the project. Short Circuit test to be conducted as Special test as per Tender Conditions if required.	We request MPMRCL to remove the dynamic short circuit test validity as the test shall be performed once to prove the dynamic short circuit capability of the transformer. The test shall not be repeated unless there is any design change. Please confirm.	The Tender Conditions shall prevail.
178.	Volume-IV -	Chapter 12	The Power Transformer shall be	Voltage rating for tertiary winding is	Corrigendum is being issued



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Technical Specificatio n	Sub-Clause 12.3.9.1 Page (23/203)	designed for the rating and other parameters indicated in Table 12.5 below 2. Primary Rated voltage 132 KV (operating voltage may increase to 132 kV + 10% (145 kV) and drop to 132 kV - 15% (112 kV)) 3. Secondary Rated Voltage- 33 KV 4. B. Winding configuration - YNyn0+ d	not specified in the ERTS. We understand, bidder can propose 11kV tertiary winding. Please confirm our understanding.	separately.
179.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.3.9.1 Page (23/203) Sub-Clause 12.3.17.3 Page (41/203)	Table 12.5 :132 /33 KV Power Transformer Rating for Gandhinagar, ISBT/MR10 Flyover, and Khajrana Square SI No. C) Short circuit impedance HV-MV1-15% HV-MV2 -22% MV1-MV2 -5% Table 12.6: 132/33 KV GTP Power Transformers, SI No. B.23 - Impedance voltage - 12.5%	 a) As per referred clause, MV1 & MV2 is mentioned for short circuit impedance. As power transformer is having only 1 no. of secondary winding. We request MPMRCL to check and amend this specification clause. b) Further, the Short circuit impedance / voltage value is contradicting between specification Table 12.5 & 12.6. Please check and issue suitable amendments. 	 a. Power transformer is having one main secondary winding and one tertiary winding. The Tender Conditions shall prevail. b. Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
180.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.3.9.1 Page (23/203)	Table 12.5 :132 /33 KV Power Transformer Rating for Gandhinagar, ISBT/MR10 Flyover, and Khajrana Square Winding configuration / vector group - YNyn0+ d	As per the vector group, YNyn0+ d, It appears that tertiary winding is being included. However, transformer voltage ratio is only 132/33kV. Hence, we presume that vector group shall be YNyn0. Please confirm.	The Tender Conditions shall prevail.
181.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.3.9.1 Page (23/203)	Table 12.5 :132 /33 KV Power Transformer Rating for Gandhinagar, ISBT/MR10 Flyover, and Khajrana Square SI No.D) No load losses (Max) - 12 kW SI No. E) Copper losses (Max) 125 KW	a) Kindly clarify whether referred losses need to be guaranteed at ONAN rating (30MVA) or ONAF rating (40MVA). b) Kindly specify the temperature at which the losses need to be guaranteed i.e 75 Deg C or 90 deg C. c) As there is no limit mentioned on the auxiliary losses, we understand that loss capitalization formula is not applicable for auxiliary losses. Please confirm.	 a) Refer GTP. The losses have to be guaranteed for both 30MVA and 40MVA. b) At 90 deg. C Corrigendum is being issued separately. c) As value of auxiliary losses very less in comparison to iron and copper loss, same will not applicable for capitalization.
182.	Volume-IV -	Chapter-12	Table 12.5 :132 /33 KV Power	As the referred clause of transformer,	Corrigendum is being issued



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Technical Specificatio n	Sub-Clause 12.3.9.1 Page (23/203) Sub-Clause 12.3.11.8.3 Page (34/203)	Transformer Rating for Gandhinagar, ISBT/MR10 SI No. 15 - Creepage distance Total 25mm per KV corresponding to highest system voltage i.e. 145KV. Creepage distance for one bushing should be 3 cm/kV.	creepage distance is contradicting. In this regard, please check and confirm the actual creepage distance of transformer bushing Further, please specify creepage distance for whole project which need to considered for outdoor insulators.	separately.
183.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.3.9.1 Page (23/203)	Table 12.5-132 /33 KV Power Transformer Rating for Gandhinagar, ISBT/MR10 Flyover, and Khajrana Square 33 kV POWER SUPPLY SLD FOR INDORE METRO YELLOW LINE Drg. No.I202-BIG- TRP-00- DWG- ATSSLD1- 00103	GTP states the impedance of Transformer to be 13%. Drawings mentions 15% impedance. Kindly clarify the contradiction. Impedance [%] shall be 12.5% with (± 7.5% IEC Tol.) @ 25MVA base at Normal tap. Please confirm	Corrigendum is being issued separately.
184.	Volume-IV - Technical	Chapter-12 Sub-Clause	Table 12.5-132 /33 KV Power Transformer Rating for Gandhinagar,	Please confirm the requirement of Thermophonic filter.	Any updated design shall be proposed by the Contractor



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specificatio n	12.3.9.1 Page (23/203)	ISBT/MR10 Flyover, and Khajrana Square		to the Engineer for approval. The Tender Conditions shall prevail.
185.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.3.9.1 Page (23/203)	Table 12.5-132 /33 KV Power Transformer Rating for Gandhinagar, ISBT/MR10, Flyover, and Khajrana Square Winding configuration YNyn0+ d TYPICAL 132KV SINGLE LINE DIAGRAM FOR RSS (AIS) Drg. No.I202-BIG- TRP-00- DWG- RSSSLD1- 00002	The winding configuration in Technical Specifications is YNyn0+ d whereas in tender drawings is YNyn0d. Kindly clarify.	Corrigendum is being issued separately.
186.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.3.9.1 Page (23/203)	Table 12.5-132 /33 KV Power Transformer Rating for Gandhinagar, ISBT/MR10 Flyover, and Khajrana Square Rated Power TYPICAL SLD FOR 132 KV RSS AIS	Rated Power is 30/40MVA (ONAN/ONAF) as per specifications In the drawing the transformer rating is mentioned as 40/50MVA (FOR SUBHASH NAGAR) 25/31.5MVA (FOR KAROND & RATNAGIRI)	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			TYPE WITH PROTECTION (SHEET 2 OF 2) Drg. No.I202-BIG- TRP-00- DWG- RSSSLD1- 00003	Kindly confirm the actual rating of transformers.	
187.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.3.12.3 Page (35/203)	The maximum temperature allowable at nominal rating for each cooling condition (natural and forced air) shall never exceed: a. 50°C above ambient temperature for mineral oil b. 55°C above ambient temperature for the copper winding and the iron core	As per referred clause, Maximum temperature rise for iron core is 55 Deg. C. However, we propose temperature rise of iron core shall be as per IEC -60076-7. Please accept the same.	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.
188.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.3.13.2 Page (36/203)	The on-load tap changer shall be three-phase enclosure type, installed in a separated oil tank, offering 16 steps, each representing 1.667% of the nominal voltage as given in the clause 12.3.9	We are offering Intank type OLTC and shall be mounted along with the active part in the Main tank only. However, we ensure that the OLTC diverter switch Oil will be in separate compartment and will not mix with the main tank oil. Please confirm.	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
189.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.3.16.1.1 Page (40/203)	For transport either by road, ship or rail, the transformer shall be filled with oil up to windings top and then with Nitrogen at 1bar pressure up to the tank top or alternatively, the transformer may be filled with Nitrogen, in full, during transportation.	Transformer shall be transported in Oil filled or in Dry air-filled condition. Nitrogen is an asphyxiating gas and hazardous for working personnel.	Corrigendum is being issued separately.
190.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.3.17.3 Page (41/203)	Table 12.6: 132/33 KV Power Transformer GTP Power Transformers 23. Impedance voltage - 12.5 %	There is contradictory between Table 12.5 and 12.6 regarding power transformer percentage impedance. Bidder considers as per table 12.5 i.e Short circuit impedance HV-MV1-15% HV-MV2 -22% MV1-MV2 -5% Kindly confirm.	Corrigendum is being issued separately.
191.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.3.19 Page (48/203)	TEST SHEET FOR POWER TRANSFORMER Tank, expansion vessel and radiator water tightness	We understand the tightness test can be carried out with gas and not necessarily with water. Kindly amend the clause.	The tightness test can be carried out as per latest Engineering practice. The Tender Conditions shall prevail.
192.	Volume-IV - Technical	Chapter-12, Sub-Clause	Table 12.13: 132 kV Current Transformer design details	As per referred clause, 132kV Revenue CT ratio is 25/1A. However,	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specificatio n	12.9.4.1 Page (64/203)	SI No. 16 - Incomer Bay Revenue CT - 25/1A TYPICAL SLD FOR 132 KV RSS - AIS TYPE WITH PROTECTION (SHEET 2 OF 2)	as per referred SLD of AIS type RSS, Revenue CT ratio is 400-200/1A. In this regard, please check and confirm the CT ratio for revenue metering.	
193.	Volume-IV - Technical Specificatio n	Chapter-12, Sub-Clause 12.9.4.1 Page (64/203)	Table 12.13: 132 kV Current Transformer design details SI No. 17, 18 & 19 Drawing - TYPICAL SLD FOR 132 KV RSS - AIS TYPE WITH PROTECTION (SHEET 2 OF 2)	CT accuracy class is not matching between referred specification clause & referred SLD. In this regard, we understand that CT cores accuracy class shall be provided as per referred SLD. Please confirm.	Accuracy class of CT are same in referred clause of technical Specifications and protection SLD. The Tender Conditions shall prevail.
194.	Volume-IV - Technical Specificatio n	Chapter-12, Sub-Clause 12.10.3.1 Page (84/203) Sub-Clause 12.10.4.5 Page	Table 12.17: 132KV Lightning Arrestor Rating SI No. 7 - Energy absorption capability - 10kJ/kV They shall correspond to the discharge class 4 of the IEC 99-4. (20 long duration current impulse of 1200 A-2ms	132kV outdoor lightning arrestor Energy absorption capability is contradicting in the referred clause. Please check and specify the actual Energy absorption capability of 132kV lightning arrestor.	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		(85/203) Sub-Clause 12.10.5.3 Page (87/203)	 – 9.5 kJ/kV). Table 12.18:132 KV Lightning Arrestor GTP SI No. 14 - Energy absorbs in 2 shocks - 9.5kJ/kV 		
195.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.2.1 Page (89/203)	12.11.2.1 The Switchgear shall, otherwise be specified generally to confirm to IEC -298, IEC 62271-100,200 and IS 3156 for PT, IS 2705 for CT, IEC 60044-1 for instrument transformers or latest be applied in the manner altered, amended or supplemented by this Specification and the Indian Electricity Rules wherever applicable.	We understand that the exact suitable CT / PT burdens and PS class CT details shall be informed during detailed engineering subject to manufacturers' confirmation. Please confirm.	The exact suitable CT/PT burdens and PS class CT details shall be submitted along with supporting calculation to the Engineer for approval. The Tender Conditions shall prevail.
196.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.3.1 Page (89/203)	Table 12.20: 33 KV Switchgear Rating S.no.6	As per RSS SLD "I202-BIG-TRP-00-DWG-RSSSLD1-00004" in Volume VI Part 1 of 2, we have considered rated current as 1250A for RSS panel.	Corrigendum is being issued separately.
197.	Volume-IV -	Chapter-12	Table 12.20: 33 KV Switchgear Rating	Kindly clarify as SLD and Table 12.20	Corrigendum is being issued



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Technical Specificatio n	Sub-Clause 12.11.3.1 Page (89/203)	S.no.6	is contradictory with respect to Rated Short Circuit Withstand Capacity.	separately.
198.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.3.1 Page (89/203)	Table 12.20: 33 KV Switchgear Rating S.no.11	As per some OEMs design, CB total breaking time is 45 to 75 msec. Kindly confirm acceptance.	The Tender Conditions shall prevail.
199.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.3.1 Page (89/203)	Table 12.20: 33 KV Switchgear Rating S.no.12	As per some OEMs design, CB total closing time is less than 80 msec. Kindly confirm acceptance.	The Tender Conditions shall prevail.
200.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.3.1 Page (89/203)	Table 12.20: 33 KV Switchgear Rating S.no.13	As per some OEMs design, Rated operating duty is O-0.3sec-CO-3min-CO. Kindly confirm acceptance.	Corrigendum is being issued separately.
201.	Volume-IV - Technical	Chapter-12 Sub-Clause	Table 12.20: 33 KV Switchgear Rating S.no.18	Kindly clarify whether Degree of protection of 33kV indoor Air	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specificatio n	12.11.3.1 Page (89/203)		insulated switchgear can be IP 4X for enclosure and IP 2X within the compartment.	
202.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.3.1 Page (89/203)	Table 12.20: 33 KV Switchgear Rating SI No. 6 - Rated normal current - For RSS panel - 1600A For ASS, TSS - 1250A SI No. 7 - Busbar current rating - 1250A Table 12.21: GTP for 33 KV Switchgear Rating SI No. B.7 Cubicle rated current a Aux. Transformer CB - 400A b Other CBs - 1600A SI No. B.13 - Bar set rated continuous current a. Aux. Transformer CB - 1250A b. Other CBs - 1600A Table 14.1: 33 KV Switchgear Rating SI No. 6 Rated normal current Tr. CB - 400A For RSS panel - 1600A For ASS, TSS - 1250A SI No. 7 - Busbar current rating - 2000A Table 14.2: GTP for 33 kV Vacuum CB SI No. B.9 - Cubicle rated current	As per referred clauses, current rating of busbar & circuit breakers are contradicting for 33kV switchgear. In this regard, we request MPMRCL to specify the actual current rating to be followed for the following 33kV switchboards: a) RSS panel i) Busbar current rating ii) Auxiliary dry type transformer CB rating iii) Other CB rating b) ASS, ASS cum TSS, Depot ASS, Depot TSS panel i) Busbar current rating ii) Auxiliary dry type transformer CB rating iii) Rectifier transformer CB rating iii) Other CB rating	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			a. Aux. Transformer CB - 400A b. Other CB's - 1200A SI No. B.15 - Bar set rated continuous current a. Aux. Transformer CB - 1250A b. Other CBs - 1250A SI No. C.9 Rated current a. Aux. Transformer CB - 400A b. Other CBs - 2000A Referred SLD, RSS - Busbar - 1250A CB - 1250A ASS - Busbar - 1250A		
203.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.3.1 Page (89/203) Chapter-12 Sub-Clause 12.11.10.3 Page (101/203)	Table 12.20: 33 KV Switchgear Rating SI No. 8 Rated breaking capacity - 1200 MVA (21kA) SI No. 10 Rated short circuit withstand capacity - 25kA for 1 sec Table 12.21: GTP for 33 KV Switchgear Rating SI No. B.14 Allowable over current - 20kA for 1 sec SI No. C. 8 Allowable over current - 14kA for 1sec SI No. C.10 - breaking capacity - 16kArms Table 14.1: 33 KV Switchgear Rating SI No. 6 Rated normal current	As per referred clauses, 33kV switchgear short circuit withstand capacity & duration are contradicting. In this regard, we request MPMRCL to specify the required short circuit withstand capacity & duration for the following 33kV switchboards: a) RSS panel i) short circuit withstand capacity & duration b) ASS, ASS cum TSS, Depot ASS, Depot TSS panel	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			Tr. CB - 400A For RSS panel - 1600A For ASS, TSS - 1250A SI No. 7 - Busbar current rating - 2000A	i) short circuit withstand capacity & duration	
			Table 14.2: GTP for 33 kV Vacuum CB SI No.B.16 - Allowable over current - 14kA for 1sec SI No. C.10 - Allowable over current - 14kA for 1sec	Accordingly, please check & amend the Sub-Clause 12.11.6.2 for the Internal Arc withstand capability of the switchgear.	
			Referred SLD, - I202-BIG-TRP-00- DWG-RSSSLD1-00004 RSS - Short circuit withstand capacity - 25kA for 3sec		
			SLD - I202-BIG-TRP-00-DWG- ATSSLD1-00103		
			ASS - Short circuit withstand capacity - 20kA for 1sec		
			SLD - I202-BIG-TRP-00-DWG- ASSSLD1-00302 ASS - Short circuit withstand capacity -		



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			25kA for 3sec		
204.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.3.1 Page (89- 90/203)	Table 12.20 33kV Switchgear Rating S.n.6	As per RSS SLD "I202-BIG-TRP-00-DWG-RSSSLD1-00004" in Volume VI Part 1 of 2, we have considered rated current as 1250A for RSS panel. Kindly confirm.	Corrigendum is being issued separately.
205.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.3.1 Page (89- 90/203)	Table 12.20 33kV Switchgear Rating S.no. 10	Kindly clarify as SLD and Table 12.20 is contradictory with respect to Rated Short Circuit Withstand Capacity. Kindly confirm.	Corrigendum is being issued separately.
206.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.3.1 Page (89- 90/203)	Table 12.20 33kV Switchgear Rating S.no.11	CB total breaking time is 45 to 75 msec. Kindly confirm.	The Tender Conditions shall prevail.
207.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.3.1 Page (89-	Table 12.20 33kV Switchgear Rating S.no. 12	CB total closing time is less than 80 msec. Kindly confirm.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		90/203)			
208.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.3.1 Page (89- 90/203)	Table 12.20 33kV Switchgear Rating S.no. 13	Rated operating duty is O-0.3sec-CO-3min-CO. Kindly confirm.	Corrigendum is being issued separately
209.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.3.1 Page (89- 90/203)	Table 12.20 33kV Switchgear Rating S.no. 18	Degree of protection of 33kV indoor Air insulated switchgear shall be IP 4X for enclosure and IP 2X within the compartment. Kindly confirm.	The Tender Conditions shall prevail.
210.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.3.1 Page (89- 90/203)	Table 12.20: 33 KV Switchgear Rating SI No. 21 - Earthing isolator making capacity - 5 KA for 1 sec Table 12.21: GTP for 33 KV Switchgear Rating Tender Drawing - TYPICAL AIS - SLD OF 33KV SIDE MAIN SWITCHBOARD WITH PROTECTION (SHEET 2 OF 2) - I202-BIG-TRP-00-DWG- RSSSLD1-	As per referred drawing, we understand that earthing isolator means cable side earthing switch which is represented as MIES /MOES in the referred drawing. Please confirm whether bidder's understanding is in order.	Earthing isolator means cable side earthing switch which is represented as MIES /MOES. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			Drawing - 33 kV POWER SUPPLY SLD FOR INDORE METRO YELLOW LINE - I202-BIG-TRP-00-DWG- ATSSLD1-00103 Drawing - TYPICAL KEY PROTECTION SLD OF ELEVATED ASS TYPE A - I202-BIG-TRP-00-DWG-ASSSLD1-00302		
211.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.2.2 Page (91/203)	Panels in RSS (and also TSSs and ASSs in Depots) shall be designed for all cable entries from bottom	Please confirm ASS and TSS Depot switchboard requirement as same is not available in Volume VI.	Refer Chapter-12 and Chapter-14 of Vol-IV Technical Specification. The Tender Conditions shall prevail.
212.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.2.1 Page (91/203)	The cubicles shall be of dust and vermin proof cabinet sheet metal. Structure made of Aluzinc material to reduce the corrosion effect. All cubicles shall be of same type. All non-welded assemblies shall be assembled by means of bolts and nuts with	The offered switchgear is type tested with CRCA sheet structure. We understand that panel with type tested design is acceptable.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			mandatory use of lock-washers.		
213.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.2.2 Page (91/203)	Panels in RSS (and also TSSs and ASSs in Depots) shall be designed for all cable entries from bottom.	Please confirm ASS and TSS Depot switchboard requirement as same is not available in Volume VI.	As per referred clause, it is clear that cable entry will be from bottom for 33 kV panel for Depot ASSs and TSSs.
214.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.2.3 Page (92/203)	c. Vacuum Interrupter shall be rated for minimum 100 nos. full short circuit to ascertain the life of Vacuum Interrupter. Bidder should submit the Type Test Reports for Short Circuit Duty with this interrupter	As per some OEM's design, VCB shall be suitable for 50 Nos full short circuit. However there is no any type test defined for full short circuit number of operations. Kindly clarify.	Corrigendum is being issued separately.
215.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.2.5 Page (92/203)	Busbar compartment: a. Bus bar compartments shall house bus bars. The bus bars shall be of rectangular or tubular cross-section suited to withstand 1200MVA peak short circuit.	The offered switchgear is type tested with hollow triangular suited to withstand 1200MVA peak short circuit. We understand that panel with type tested design is acceptable.	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.
216.	Volume-IV - Technical Specificatio	Chapter-12 Sub-Clause 12.11.4.2.6	e. A precise device for displaying the end of insertion travel with limit switches or any other proven mechanical	We have assumed the requirement in this clause as VCB with Test and Service position limit switch.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	n	Page (92/203)	arrangement,		
217.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.2.6 Page (92/203)	i. An annunciation device for "33 kV voltage on", by mean of a capacitive divider with neon lamps (one per phase), glowing permanently in live conditions. A capacitive divider shall be provided in the fixed part of the cubicle.	As pe some OEM have design, where Capacitive dividers are provided in cable compartment (Fixed part of cubicle) and Voltage presence indicators are provided in LV compartment. Kindly confirm acceptance.	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.
218.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.2.6 Page (92/203)	12.11.4.2.6 - e	We have assumed the requirement in this clause as VCB with Test and Service position limit switch. Kindly confirm.	The Tender Conditions shall prevail.
219.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.2.7 Page (93/203)	b. The cable compartment's depth shall be less than one meter and the clearance between the bottoms of the bus bar to base plate is of minimum 500 mm. The compartment height shall be at least 700 mm to ease the cable connections and be equipped with an external cable support device.	As per some OEMs design, Depth of the panel shall be selected so as to accommodate CT/PT/SA/Earth switch/VDI etc and shall be more than 1 meter. Please confirm acceptance.	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
220.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.2.7 Page (93/203)	(f) Position of the earthing isolator shall be visible through a glazed port	Request to modify the clause as - Position of the earthing switch shall be visible through a glazed port.	The Tender Conditions shall prevail.
221.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.2.9 Page (94/203)	Each cubical shall be provided with space heater elements of sufficient capacity with thermostat control of 35 °C over ambient temperature at loading condition. The cubicles shall be capable of withstanding without any damage the loads generated by 1200 MVA peak short-circuits.	We have considered space heater with thermostat control.	The Tender Conditions shall prevail.
222.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.2.9 Page (94/203)	a. The switchgear compartment shall be fully drawn-outself-contained trolley arrangement with breakers mounted on the same. The interchangeability of cubicles and Switchgear shall be ensured by the use of much averted production and assembly works.	We presume that the interchangeability requirement is pertaining to the circuit breaker of the same rating and type. Kindly confirm the same.	The Tender Conditions shall prevail.
223.	Volume-IV - Technical	Chapter-12 Sub-Clause	a. Voltage presence capacitor dividers, relay and facade indicator light.	Voltage presence capacitive dividers are provided in cable compartment	Voltage presence capacitive dividers are provided in cable



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specificatio n	12.11.4.2.8 Page (94/203)		(Fixed part of cubicle) and Voltage presence indicators are provided in LV compartment.	compartment (Fixed part of cubicle) and Voltage presence indicators are provided in LV compartment. Voltage presence indicators may be provided in LV compartment. The Tender Conditions shall prevail.
224.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.2.8 Page (94/203)	e. Control and monitoring devices for the CBs (programmable logic control)	Circuit breaker control & monitoring functions are part of numerical relay. separate PLC not applicable.	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.
225.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.2.12 Page (95/203)	a. Each cubicle shall comprise a copper grounding bus-bar of suitable cross-section to which each of the metal masses of the component parts of the cubicle shall be connected, together with those of the instrument transformers.	As per some OEMs design no separate earthing for CT/PT required as panels are manufactured with unpainted Aluzinc material which is good conductor and connected to earth bus. CT/PT are bolted to this structure and hence no separate earthing is envisaged. Kindly confirm acceptance of same. Please confirm	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				acceptance.	
226.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.2.13 Page (95/203)	Paint	As per some OEMs design Powder coating is provided only for front doors and end covers which are made up of CRCA sheet. Panel made up of Alu Zinc does not require any surface treatment and shall remain unpainted. We provide powder coating of C3 corrosion class as per ISO 12944:2017 and powder coating procedure shall be as per our standard practise with single coat. Please confirm acceptance.	The Tender Conditions shall prevail.
227.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.3.1 Page (96/203)	Under voltage tripping coil (Auxiliary voltage off)	Aux contactor shall be provided for Auxiliary voltage trip. Please confirm.	The Tender Conditions shall prevail.
228.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.2.13 Page	c. All terminals should be provided with suitable cadmium plated and passivated high tensile steel hard wires facilitate cables termination	As per some OEMs design, standard practise to provide Zinc electroplated, Blue chromated steel hardware to facilitate termination. Please confirm	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall



Sr. No.	Tender Document Reference	nt Clause/Para Tender Document Excerpt/ Title/ Particulars of Tender Document Particulars of Tender Document		Description of Query Raised by Tenderer	Clarification	
		(96/203)		acceptance.	prevail.	
229.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.2.13 Page (96/203) Sub-Clause 12.11.4.2.15	b. Local / Remote /off control switch	As per some OEMs design, there are 2 selector switch i.e Local/Remote selector switch and Trip Neutral Close selector switch. Kindly be noted "Off" control switch is part of TNC switch and not LR switch. Please confirm acceptance.	The Tender Conditions shall prevail.	
230.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.2.16 Page (96/203)	The degree of protection shall be IP41 or higher	Degree of protection of 33kV indoor Air insulated switchgear shall be IP 4X for enclosure and IP 2X within the compartment	The Tender Conditions shall prevail.	
231.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.3.1 Page (96/203)	a. Up & down stream plug-in connectors	Offered VCB shall be horizontal isolation type hence Up & down stream plug-in connectors are not applicable.	The Tender Conditions shall prevail.	
232.	Volume-IV -	Chapter-12	d. Current transformer performances	Technical sheet not available. Kindly	Please refer Clause No 12.9	



Sr. No.	Tender Document Reference	nent Clause/Para Particulars of Tender Document Particulars of Tender Document		Description of Query Raised by Tenderer	Clarification
	Technical Specificatio n	pecificatio 12.11.4.3.2 included into the relevant Chapter.		provide the same.	and Table 12.13 of Chapter 12 of Vol-IV Technical details of Current Transformer. The Tender Conditions shall prevail.
233.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.3.3 Page (97/203)	d. Voltage transformer performances shall be as per technical sheets included in the relevant Chapter.	Technical sheet not available. Kindly provide the same.	Please refer Clause No 12.9.20 and Table 12.14 of Chapter 12 of Vol-IV Technical details of Voltage Transformer. The Tender Conditions shall prevail.
234.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.3.2 Page (97/203)	12.11.4.3.2 - d	Technical sheet not available. Kindly provide the same.	Refer Chapter-12 and Chapter-14 of Vol-IV Technical Specification
235.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.4.3.3 Page (97/203)	12.11.4.3.3 - d	Technical sheet not available. Kindly provide the same.	Refer Chapter-12 and Chapter-14 of Vol-IV Technical Specification



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
236.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.8.6.1 Page (100/203)	e. 51G: Standby earth fault protection f. Temperature Alarm, first threshold g. Temperature tripping, second threshold	51G(Standby earth fault), Winding Temperature Alarm / Trip are considered as part of numerical relay. Please confirm acceptance.	51G (Standby earth fault Winding Temperature Alarm / Trip are considered as part of numerical relay. The Tender Conditions shall prevail.
237.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.9.3 Page (100/203)	Energy meter (Electronic energy meter, Accuracy class 0.5, to enable measurement of kWh and instantaneous maximum demand kVA. Only one energy meter shall be provided, which shall be capable to indicate/record/store the values of energy (kWh) and max demand (kVA), delivered in total by Transformers, through suitable summation CT and connections)	We understand from this clause that Energy meter of CL 0.5 accuracy will be connected to Protection core of CT (5P15 core) and not to any separate metering core of CT (0.5 Core). Please confirm if our understanding is correct.	Energy meter will connect to separate metering core and not connected to protection core. The Tender Conditions shall prevail.
238.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.9.3 Page (100/203)	Power supply authority metering bay Drawing - TYPICAL SLD FOR 132 KV RSS - GIS TYPE WITH PROTECTION (SHEET 2 OF 2)	As per referred SLD, Power supply authority metering bay is shown for 1323kV Incomer GIS Bay. In this regard, we understand that metering bay including 132kV cable & termination kit between metering bay	Utility metering portion is under the scope of the contractor. Metering part may be inside panel type or outside bay type as per PSA requirement. The Contractor



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			Drawing No. TYPICAL 132kV/33kV RSS (GIS) SWITCHYARD EQUIPEMENT LAYOUT (SHEET - 01 OF 03) - I202-BIG-TRP-00-DWG- RSSLYT1- 00017 Price schedule. Bill No. 1.2 Item No. A.1.1	& incomer bay shall be in Power supply authority scope. The same is not envisaged under this contract. Please confirm. If PSA metering bay need to be provided under this contract, please add a sperate line item in the price schedule for the same and clarify the following: a) Whether metering bay shall be AIS type or GIS type? b) Location of metering bay in each GIS RSS layout c) 132kV cable & associated termination on either ends between metering bay & Incomer GIS bay d) 132kV cable size and specification	shall interface with local power supply authority for the same including accuracy class of energy meters. The Tender Conditions shall prevail.
239.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.10.3 Page (101/203)	Table 12.21: GTP for 33 KV Switchgear Rating 2) Movable Part Partial discharge Magnetizing & small inductive current switching	Pls note that following type tests are not applicable for offered MV switchgear panels as per IEC-62271-1 standard • Magnetizing & small inductive current switching Test	The Type test shall be performed as detailed in tender document and the table therein. The Tender Conditions shall



Sr. No.	Tender Document Reference	ument Clause/Para Tender Document Excerpt/ Title/		Description of Query Raised by Tenderer	Clarification
				Partial Discharge test Request you to suitably modify the requirement. Applicable for MV switchgear panels.	prevail.
240.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.10.3 Page (101/203)	Table 12.21: GTP for 33 KV Switchgear Rating Table 12.21 - B.14	Kindly clarify as SLD, Table 12.20, Table 12.32 is contradictory with respect to Rated Short Circuit Withstand Capacity	Corrigendum is being issued separately.
241.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.10.3 Page (101/203)	Table 12.21: GTP for 33 KV Switchgear Rating Table 12.21 - 7	As per Volume VI SLD, we have considered Other CB cubicle rated current as 1250A and not 1600A.	Corrigendum is being issued separately.
242.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.10.3 Page (101/203)	Table 12.21: GTP for 33 KV Switchgear Rating Table 12.21 - B.9	As per type tested design, Phase barriers are not envisaged for bus bars for some OEMs design. Please confirm acceptance.	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.
243.	Volume-IV - Technical Specificatio	Chapter-12 Sub-Clause 12.11.10.3	Table 12.21: GTP for 33 KV Switchgear Rating Table 12.21 - B.10	As per some OEMs design, the standard practise to provide polycarbonate shrouds for bus bar	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Document Clause/Para (Page No) Tender Document Excerpt/ Title/ Particulars of Tender Document		Description of Query Raised by Tenderer	Clarification
	n	Page (101/203)		joints in bus bar compartment	
244.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.10.3 Page (101/203)	Table 12.21: GTP for 33 KV Switchgear Rating Table 12.21 - B.13	As per Volume VI SLD, we have considered Other CB bar set rated continuous current 1250A and not 1600A.	Corrigendum is being issued separately.
245.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.10.3 Page (101/203)	Table 12.21: GTP for 33 KV Switchgear Rating Table 12.21 - B.14	Kindly clarify as SLD, Table 12.20, Table 12.32 is contradictory with respect to Rated Short Circuit Withstand Capacity	Corrigendum is being issued separately.
246.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.10.3 Page (101/203)	Table 12.21: GTP for 33 KV Switchgear Rating Table 12.21 - B.18	As there is no requirement of isolator, flip-flop contacts for isolator open/closed position monitoring is not applicable.	There is provision of Earthing isolator in 33 kV panel. Please refer relevant clauses and SLDs. The Tender Conditions shall prevail.
247.	Volume-IV - Technical	Chapter-12 Sub-Clause	Table 12.21: GTP for 33 KV Switchgear Rating Table 12.21 - C.8	Kindly clarify as SLD, Table 12.20, Table 12.32 is contradictory with	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specificatio n	12.11.10.3 Page (101/203)		respect to Rated Short Circuit Withstand Capacity	
248.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.10.3 Page (101/203)	Table 12.21: GTP for 33 KV Switchgear Rating Table 12.21 - C.10	Kindly clarify as SLD, Table 12.20, Table 12.32 is contradictory with respect to Rated Short Circuit Withstand Capacity	Corrigendum is being issued separately.
249.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.10.3 Page (101/203)	Table 12.21: GTP for 33 KV Switchgear Rating Table 12.21 - C.15	As per some OEMs design, CB total closing time is less than 80 msec. Kindly confirm acceptance.	The Tender Conditions shall prevail.
250.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.10.3 Page (101/203)	Table 12.21: GTP for 33 KV Switchgear Rating Table 12.21 - C.16	As per some OEMs design, Rated operating duty is O-0.3sec-CO-3min-CO. Kindly confirm acceptance.	Corrigendum is being issued separately.
251.	Volume-IV - Technical Specificatio	Chapter-12 Sub-Clause 12.11.10.3	Table 12.21: GTP for 33 KV Switchgear Rating Table 12.21 - D.4	As per some OEMs design, Standard followed for CT is IS 2705	Relevant IS 2705 and IEC 61869 shall be followed.



Sr. No.	Tender Document Reference	erence (Page No) Tender Document Excerpt/ Title/ Particulars of Tender Document		Description of Query Raised by Tenderer	Clarification
	n	Page (101/203)			The Tender Conditions shall prevail.
252.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.10.3 Page (101/203)	Table 12.21: GTP for 33 KV Switchgear Rating D.12	We understand from CL 12.11.9.3 Page 100 of 203 that separate Metering core is not required in CT which is contradictory Table 12.21 D.12 clause. Please clarify the same.	Corrigendum is being issued separately.
253.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.10.3 Page (101/203)	Table 12.21: GTP for 33 KV Switchgear Rating Table 12.21 - D.13	We understand from this clause that STC of CT shall be for 16kA 1 sec. Kindly confirm.	Corrigendum is being issued separately.
254.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.10.3 Page (101/203)	Table 12.21: GTP for 33 KV Switchgear Rating Table 12.21 - E.4	Standard followed for PT is IS 3156	IEC 186 / IS 3156 is applicable. The Tender Conditions shall prevail.
255.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.10.3 Page	Table 12.21: GTP for 33 KV Switchgear Rating Table 12.21 - E.16	No separate earthing for PT required as panels are manufactured with unpainted Aluzinc material which is good conductor and connected to	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)		Fender Document E Particulars of Tende		Description of Query Raised by Tenderer	Clarification
		(101/203)				earth bus. CT/PT are bolted to this structure and hence no separate earthing is envisaged.	prevail.
256.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.11.10.3 Page (101/203)		ole 12.21: GTP for 33 ing Table 12.21 - I.3	KV Switchgear	Standard followed for Numerical relay is IEC 60255.	Corrigendum is being issued separately.
257.	Volume-IV - Technical Specificatio	Sub-Clause	Tab	ole 12.22: Test Sheet		Partial discharge, Over-voltage, Magnetising & small inductive current switching tests are not mandatory	The Tender Conditions shall prevail.
	n	Page (107/203)	S	N Description	ACDB Rating	type test and hence not envisaged.	
		(1017200)	1	Circuit Breakers	MCCB		
			2	CB Rating	400 A		
			3	Busbar Rating	400 A		
			4	Short circuit rating	7 KA		
258.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.12.3.1 Page	Rat	ole 12.23: Battery & E ing No. A.5 - Backup cap	, ,	As per referred table 12.23, RSS battery backup duration is 8 hours. However, as per Sub-Clause 12.12.7.4, battery backup duration is	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)			ent Excerpt/ Title/ ender Document	Description of Query Raised by Tenderer	Clarification
		(111/203)	capacity of battery shall be determined		shall be determined nomy of the station required to retain f the standby lighting nonitoring auxiliaries	6 hours. In this regard, please check and specify the actual backup duration of the RSS battery design	
259.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.15.3.1 Page (123/203)	SN 1 2 3 4	1 Circuit Breakers MCCB 2 CB Rating 400 A		As per referred clause, ACDB incomer & busbar current rating shall be 400A at RSS. However, as per referred drawing, ACDB incomer & busbar current rating is shown as 630A at RSS. Please check and confirm the current rating of incomer & busbar for ACDB at each RSS.	Corrigendum is being issued separately.
260.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.17.3.3 Page (137/203)	mean equiv - the & co - Ma neut	means of two 120sq.mm copper equivalent cables to - the earth mat under the SWGR room & control room - Main Transformer (132kV/33kV) neutrals		Generally, Main Earth mesh are designed by suitable size of GI earth conductor. Therefore, our understanding is to do the linking by same earth conductor i.e. GI earth conductor of suitable size instead of 120 sq.mm copper equivalent cables to avoid bi-metallic corrosion. Please	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			132kV - Baffle walls between Transformers - Substation fencing - Lightning protection Earthing".	confirm.	
261.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.17.3.8.5 Page (138/203)	Earth conductors shall be linked by fixed connection.	We understand that conductors shall be bonded through welding. Kindly confirm.	All the joints of main earth grid conductor and connections with earth electrode shall be carried out through appropriate welding process. Please refer Note-5 written in Drawing No I202-BIG-TRP-00-DWG-RSSS-LD1-00005 Rev-00. The Tender Conditions shall prevail.
262.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.1.1 Page (141/203)	The Contractor will be required to arrange for land preparation, erection of boundary wall, entrance gate, foundations, baffle walls between transformers transformer	Since Gandhinagar RSS is coming under Deport Area, bidder requests to Customer to confirm that the same shall be levelled and graded with required Compaction by Deport Civil	RSS is coming under Deport Area, shall be levelled and graded with required Compaction by Deport Civil Contractor.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			support	Contractor and is not in the scope of Package IN-09.	The Tender Conditions shall prevail.
263.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.2 Page (141/203)	GEOTECHNICAL INVESTIGATION	We presume that the Employer have already performed Soil tests on RSS locations. Request to kindly share the SBC report in order to evaluate the civil quantity.	The contractor shall perform soil test as per clause no 12.18 Civil Works of Vol-IV Technical Specifications. The Tender Conditions shall prevail.
264.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.4.1 Page (142/203)	LAND PREPARATION The Bidder is advised to inspect the sites for various Receiving Substation and gather for himself various details such as topography and land levels, soil condition including the safe bearing capacity, soil resistivity etc, HFL (highest flood level) at the Substation site, drainage requirements etc, in order to ensure that the work content is fully appreciated by him at the time of preparation of bid.	Since Gandhinagar RSS is coming under Deport Area, bidder requests to Customer to confirm that the same shall be levelled and graded with required Compaction by Deport Civil Contractor and is not in the scope of Package IN-09.	RSS is coming under Deport Area, shall be levelled and graded with required Compaction by Deport Civil Contractor. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
265.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.5.1 Page (142/203)	ROAD & CULVERTS The main approach road including modification of existing roads to meet the site conditions, roads for access to equipment and buildings within substations are in the scope of the Contractor	Bidder understands that main approach Road up to RSS (i.e. outside RSS boundary) from the nearest main road is in the scope of IN-09 Contractor except Depot. For Depot, Depot Contractor shall provide suitable access to the RSSs as well as complete all civil works of RSS. Please confirm.	The civil works including road inside the RSS premises is within the scope of Power Supply & Traction Contractor. The Tender Conditions shall prevail.
266.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.5.1 Page (142/203)	The main approach road including modification of existing roads to meet the site conditions, roads for access to equipment and buildings within substations are in the scope of the Contractor. Layout of the roads shall be based on general detailed arrangement drawing for the substation. If extra road is required for functional point of view, which has not been mentioned in the layout drawing, the Contractor should provide the same without extra cost to the owner. The access road shall be bitumen concrete	Please provide the quantity of approach road. • Please provide the cross section • Please specify the road length to be considered in the scope.	The contractor shall design during construction stage on the basis of actual site conditions. The quantity for referred items has been already covered in Bill No. IN-10.3 (Part-B Roads) of Vol-VII (Pricing Documents) The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			(BC) and transformer area of RCC as per MOST specifications.		
267.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.5.1 Page (142/203)	12.18.5 ROAD & CULVERTS	Please provide detail of Existing road with length where modification need to be done. Extra road for functional point of view- Please describe/Elaborate	These are new sites and roads /culverts to be as per development of site. The Tender Conditions shall prevail.
268.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.5.1 Page (142/203)	12.18.5 ROAD & CULVERTS	We could not find the marked drawing as mentioned in clause. Kindly mention the drawing number.	Please refer the drawing no.I202-BIG-TRP-00-DWG-RSS2YT1-00017 Rev-00 & I202-BIG-TRP-00-DWG-MISINS1-00705 Rev-00.In these drawing, road has been shown typically. However, the contractor will develop drawing on the basis of actual site conditions for approval of the Engineer.
269.	Volume-IV - Technical Specificatio	Chapter-12 Sub-Clause 12.18.4.2	if it becomes necessary to cut or transplant trees, it shall be done by the Contractor with the approval of	Bidder requests Employer that if it becomes necessary to cut or transplant trees, then the required	It is under the scope of the contractor. The Engineer will support. Please refer Clause



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	n	Page (142/203)	MPMRCL, strictly in accordance with the Local laws.	permission for tree cutting / transplant of tree shall be arranged by the Employer from concern local Authorities. Please confirm.	3.2.9 Chapter 3 Interfaces Vol-IV Technical Specifications. The Tender Conditions shall prevail.
270.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.6 Page (143/203)	DRAINAGE	 Could you please confirm the type and section of drainage (RCC or Brick). Also provide standard drawings if any. Please mention specification and No of pump if any. Shall we consider that the excess water of sump pit will be directly pump out or, RWH Pit is required. Please clarify 	 Drainage will be of RCC. Requirement of Pumps is site dependent and can be firmed up during construction. RWH Pit is required. The Tender Conditions shall prevail.
271.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.6 Page (143/203)	FOUNDATION work	In Drawing no "I202-BIG-TRP-00-DWG-RSSLYT1-00015" shown 10m pile with pile cap foundation. Kindly confirm whether these foundation drawings need to be strictly followed. Request you to	Pile foundation details are indicative. Contractor to propose foundation type based on Geo Technical soil report to be undertaken by the Power Supply & Traction



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				provide the Soil report related to this design.	Contractor during construction period. The Tender Conditions shall prevail.
272.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.6 Page (143/203)	FOUNDATION WORK	Please specify the minimum grade of RCC and PCC. As we understand from BOQ, the grade of RCC is M30 for GIS Buildings and M25 for other switchyard RCC structure. Kindly confirm the above points.	The Tender Conditions shall prevail.
273.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.5.4 Page (143/203)	It may be noted that RSSs at Gandhinagar are located inside the depot. A specific area has been marked for the RSS as indicated in the attached drawings. The Depot Contractor shall provide suitable access to the RSSs as well as complete all civil works of RSS to the satisfaction of the contractor. For the purpose, the Contractor shall be required to interface with the Depot Contractor.	Bidder understands that main approach Road up to RSS (i.e. outside RSS boundary) from the nearest main road is in the scope of IN-09 Contractor except Depot. For Depot, Depot Contractor shall provide suitable access to the RSSs as well as complete all civil works of RSS. Please confirm.	The civil works including road inside the RSS premises is within the scope of Power Supply & Traction Contractor. However, depot Contractor shall provide suitable access to the RSSs. The Tender Conditions shall prevail.
274.	Volume-IV -	Chapter-12	Concrete shall conform to the	Please provide the information for	Corrigendum is being issued



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Technical Specificatio n	Sub-Clause 12.18.7.3 Page (144/203)	requirements mentioned in IS:456 and all the tests shall be conducted as per the relevant Indian Standard Codes as mentioned in Standard Field Quality Plan appended with the Specification. A minimum grade for PCC and RCC shall be used for all structural/load-bearing members as per latest IS 456.	Minimum grade of concrete mix or Exposure condition as per IS 456 and Reinforcement grade to be used in civil structures.	separately.
275.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.8.6 Page (145/203)	Sub-Clause 12.18.8.6 Cable trenches shall be provided for 132 kV, 33kV and 750 V dc cables. Suitable trenches shall be provided for connecting 33kV cables from RSS control room to TSS control rooms in depots Table 3.5: Interfacing Requirements with Depot Contractor(s) Item No. 1 - Depot Contractor(s) a. Shall construct cable trenches for carrying the cables from RSS complex to Depot ASS and OCC ASS and various third	As per referred interface, we understand that cable trench between Depot RSS to Depot ASS, Depot TSS, OCC shall be provided by Depot contractor. The scope of this contract is limited only to the cable trench required within RSS boundary. Please confirm.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			rail / return rails in the depot area. b. Shall provide and install cable support infrastructure (metallic brackets, trays etc.) inside the trench / cable duct as per requirement		
276.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.8.7 Page (145/203)	CABLE & PIPE TRENCHES A separate control wire duct shall be provided for cable connections from the yard equipment to the control room building equipment and within the control room building.	Bidder understand that separate pipe conduit in the common duct/trench shall be provided for connections from the yard equipment to the control room building equipment and within the control room building. Please confirm.	Corrigendum is being issued separately.
277.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.11.3 Page (146/203)	The front portion of boundary wall shall however be with a RC jali and 12 mm square MS bar top above brick work and pebble dash plaster finish with colour pigment. The steel work shall be given two coats of synthetic enamel paint of approved make over one coat of primer.	Bidder request Employer to further clarify the requirement of RC Jali. RC Jali shall be provided instead of Brick wall in between 2 columns up to top of boundary wall and then provide 12 mm square MS Bar for front portion of boundary wall. OR RC Jali shall be provided on top of Brick wall of Boundary wall. Please clarify.	The contractor will propose the design for approval of the Engineer. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
278.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.11 Page (146/203)	GATES AND BOUNDARY WALLS	Please provide standard drawing of gate, boundary wall and switchyard fencing if any.	Drawing no. I202-BIG-TRP- 00-DWG-MISINS1- 00704/R00 provided. Corrigendum is being issued separately.
279.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.13.3 Page (147/203)	Civil & Structural Design	Please mention that RCC baffle wall or Brick infill baffle wall is required.	RCC baffle wall is required. Please refer BoQ Bill No IN 10.4 Section-B Vol-VII Pricing Document. The Tender Conditions shall prevail.
280.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.13.5 Page (149/203)	Architectural Services	Please clarify that contractor shall strictly follow the architectural and civil drawing received with tender documents or, contractor may modify the drawings as per equipment's layout and requirement.	Functional requirement are shown in Tender architecture drawings as per standard practice followed in metro. Final arch drawings to be prepared by the contractor and got approved from the Engineer.
281.	Volume-IV - Technical Specificatio	Chapter-12 Sub-Clause 12.18.13.5	Architectural Services	Please provide more detail in regards.	Refer Architectural BOQ Vol- VII Pricing Document.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	n	Page (149/203)			
282.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.13.8.5 Page (150/203)	12.18.13.8.5 Doors and Windows	Please specify the section detail and minimum thickness of section if any.	Section details shall be provided during construction stage as per vendor/manufacturer of the equipment proposed by the contractor and approved by the Engineer.
283.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.13.8.8 Page (152/203)	The Control rooms shall be equipped with suitable fire detection alarm systems, firefighting equipment and panel gas flooding system.	We are considering panel flooding system (NOVEC 1230) for ACDB, DBCB & Dry transformers only. Please confirm	The Tender Conditions shall prevail.
284.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.13.8.8 Page (152/203)	The Control rooms shall be equipped with suitable fire detection alarm systems, firefighting equipment and panel gas flooding system.	We are considering only gas based fire protection system for panels in building, no water based protection system or room flooding system is being considered. Please confirm.	The contractor shall propose as per IGBC guidelines for Platinum rating for approval of Engineer. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
285.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.13.8.8 Page (152/203)	The Control rooms shall be equipped with suitable fire detection alarm systems, firefighting equipment and panel gas flooding system.	Please provide detail specification for fire detection and alarm & panel flooding system if available.	The contractor shall propose as per IGBC guidelines for Platinum rating for approval of Engineer. The Tender Conditions shall prevail.
286.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.13.8.6 Page (151/203)	The rooms must be sufficiently ventilated. In the control room, where staff are likely to be present constantly, the following indoor climatic parameters shall be maintained Temperature - 201C Minimum, 271C Maximum Humidity - 60% Maximum b. The control room should be provided with air-conditioning to achieve the above results. The battery room should also be provided with air-conditioning.	We are considering VRV type AC system with 50% stand by units. Please confirm.	The Contractor shall propose as per IGBC requirement for approval of Engineer. The Tender Conditions shall prevail.
287.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.13.8.6 Page	The rooms must be sufficiently ventilated. In the control room, where staff are likely to be present constantly, the following indoor climatic parameters	We are considering pressurized ventilation system for GIS hall with 4 ACH, Supply shall be through fans and exhaust through motorised	The Contractor shall propose as per requirement of OEM and IGBC conformance for approval of Engineer.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		(151/203)	shall be maintained Temperature - 201C Minimum, 271C Maximum Humidity - 60% Maximum b. The control room should be provided with air-conditioning to achieve the above results. The battery room should also be provided with air-conditioning.	damper. Please confirm.	The Tender Conditions shall prevail.
288.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.13.8 Page (151/203)	Ventilation	We understand there is no requirement for Solar system or VRV system in RSS. Kindly confirm.	The Power Supply & Traction Contractor shall follow the IGBC guidelines for Platinum rating for RSS building. The Tender Conditions shall prevail.
289.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.14.1.2 Page (157/203)	The cable path in the open yard shall be in the form of suitable RCC cable trenches with appropriate RCC covers or in the form of Heavy Duty PVC pipes of suitable diameter, subject to the Engineer's approval Drawing - TYPICAL 132/33 KV RSS	As per referred drawing, Directly buried cable is shown between 132/33kV transformer & 33kV switchgear. However, as per referred clause, RCC cable trench is mentioned in the RSS open yard. In this regard, please clarify whether directly buried trench can be	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			SWITCHYARD CABLE TRENCHE LAYOUT PLAN - I202-BIG-TRP-00- DWG-RSSSLD1-00006	considered for 33kV & 132kV cable inside the RSS plot boundary.	
290.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.19.12.1 Page (157/203)	The following metering arrangements shall be provided on the incoming feeders from MPPTCL: a. Energy meter (Electronic energy meter, Accuracy class "0.2s", to enable measurement of Active energy (kWh), Reactive energy (kVARh), Apparent energy (kVAh), phase angle, frequency, power factor, instantaneous maximum demand, integrated maximum demand etc. The meters should have recording and memory facilities. Only one Energy meter is required to be provided, which shall be able to indicate /record/store the total energy of both the incoming feeders, through suitable summation CT and connections). As per the requirements of the power supply Authority for revenue purpose with dedicated CTs and PTs	As per referred SLD of 132kV Gandhinagar AIS depot RSS, TVM Main & Check meter are shown for each Incomer bay with dedicated CT & PT. A common energy meter with summation CT is not shown for RSS incomer as mentioned in the referred specification clause. Further, as per Chapter-3, Interface, Table 3.1: Interfacing Requirements with PSA, Item no. 4 - PSA shall provided necessary check meters for measurement of voltage, current, P.F., kVA, kVARh, kWh, at PSA Substation end. In this regard, we understand that Only one number of energy meter (Main meter only) with summation CT shall be provided for both the RSS	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			Drawing - TYPICAL SLD FOR 132 KV RSS - AIS TYPE WITH PROTECTION (SHEET 2 OF 2) - I202- BIG-TRP-00-DWG-RSSSLD1-00003	incomer in this contract and check meter shall be provided by PSA. Please confirm whether bidder's understanding is in order.	
291.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.18.14.2.1 Page (157/203)	Boundary Wall Along the peripheries of the Substation sites, boundary walls matching with the finish of buildings, consisting of RCC as per MPMRCL design & specification (like depot) in accordance with the standard MPMRCL Specifications, shall be constructed by the Contractor.	Bidder requests Employer to share the finish of buildings, consisting of RCC as per MPMRCL design & specification (like depot) in accordance with the standard MPMRCL Specifications for RSS Boundary wall Finish	This has to be coordinated with the Depot contractor. The contractor will propose the design for approval of the Engineer. The Tender Conditions shall prevail.
292.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.19.2.1 Page (158/203)	The protection relays shall conform to IEC 255 or BS 142 and shall	We understand to follow the latest version of stated standards. Kindly confirm.	The latest version of stated standards shall be followed. The Tender Conditions shall prevail.
293.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.19.6.5 Page	All protective relays, auxiliary relays and timers except the lock out relays and interlocking relays specified shall be provided with self-reset type contacts.	Lock out, Trip circuit supervision, Transformer Winding temperature Alarm / Trip are considered as part of numerical relay.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		(161/203)	All protective relays and timers shall be provided with externally hand reset positive action operation indicators with inscription. All protective relays which do not have built-in hand-reset operation indicators shall have additional auxiliary relays with operating indicators (Flag relays) for this purpose. Similarly, separate operating indicator (auxiliary relays) shall also be provided in the trip circuits of protections located outside the board such as Buchholz relays, oil and winding temperature protection, sudden pressure devices, fire protection etc.		
294.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.19.6.10 Page (161/203)	The Contractor shall furnish detailed proposal of batteries preferably in the Electrical Erasable Programmable Read Only Memory (EEPROM). This is to allow PCU settings to be changed in the foreground without affecting the actual operating values in the background.	The measured parameters will be stored in the non-volatile memory. The memory will be stored till 48 hours in case the auxiliary supply to the relay fails.	The Tender Conditions shall prevail.
295.	Volume-IV -	Chapter-12	The relays shall have communication	We have considered numerical relays	The Tender Conditions shall



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Technical Specificatio n	Sub-Clause 12.19.6.19 Page (164/203)	ports for local communication for relay settings, modifications, extraction and analysis of fault/event/ disturbance records from a laptop and for communication with the SCADA system.	with 1 front RJ 45 port for local parametrization and 1 rear RJ 45 port for communication on IEC 61850 protocol.	prevail.
296.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.19.8.1 Page (164/203)	Each PCU shall be integrated with a protection relay module within which standard protective relay features are incorporated. The equipment shall comply with IEC 255 or BS 142. The application, performance and testing of protection relay modules shall be in accordance with the appropriate IEC standards.	Standard followed for Numerical relay is IEC 60255.	The equipment shall comply with IEC 60255 or BS 142. The Tender Conditions shall prevail.
297.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.19.8.5 Page (165/203)	In the event of a system fault, the protection module shall record values of current and voltage at a scan frequency no lower than 1 kHz over a time window of at least 1 second before the event to 1 second after the event with time stamping. The fault data shall be captured and recorded and shall be	The disturbance recorder can be set to a recording frequency ranging from 400Hz to 1600Hz, depending upon the length of recording required.	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			downloaded in the OCC/BCC for fault analysis.		
298.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.19.9.2.9 Page (166/203)	Cables required for the protection & to be laid along the route of 132kV Cable shall be in the Scope and as per the requirements of MPPTCL	Since 132kV cabling between GSS & RSS is not in IN-09 scope, the pilot wire (FO) cable between GSS & RSS shall also be part of MPPTCL contractor scope along with 132kV Cable. Please confirm our understanding.	The Tender Conditions shall prevail.
299.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.19.5.2.5 Page (166/203)	Reliability: - A system is not properly designed and managed if it is not adequately protected by a reliable protection system. Reliability will be enhanced by providing primary and backup protection.	We understand standby relay protection is not required. Kindly confirm.	The Tender Conditions shall prevail.
300.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.20.3.1 Page (176/203)	Table 12.29: LV Cable Rating Conductor - Bare or tinned copper Tender drawing - TYPICAL 415 V AC DISTRIBUTION SCHEMATIC	As per referred clause, LT cable conductor shall be bare or tinned copper. However, as per referred drawing, LT cable between Auxiliary dry type transformer & ACDB is mentioned as 3.5Cx150 Sq.mm Al	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			DIAGRAM FOR RECEVING SUBSTATION (TYPE-6) - I202-BIG- TRP-00-DWG-RSSSCH1-00010	cable. In this regard, we understand that bidder can provide either copper or aluminium conductor based on actual current rating requirement. Please confirm.	
301.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.20 Page (176/203)	LV Cables	As per referred clause, we understand that LV cable shall be FRLS/FRLSZH type with XLPE insulation. Please confirm the requirement of the following layers in LV cable a) Armour b) Inner sheath	The bidder will propose the details as per best Engineering practise for approval of Engineer. The Tender Conditions shall prevail.
302.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.20.9.7 Page (180/203)	Systematically, for control and monitoring cables, all the links of a section shall include 15% spare conductors with at least one spare conductor per cable.	We understand that 15% spare cores are to be considered for LV Power and control cables. Kindly confirm Kindly indicate the size and specification for Fibre optic (FO) cables and Pilot wire protection.	Corrigendum is being issued separately.
303.	Volume-IV - Technical Specificatio	Chapter-12 Sub-Clause 12.21.1.2	Each incomer Bay (2 Nos.) consisting of;	There is discrepancy between the SLD and the specification since there is no isolation device for voltage	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	n	Page (182/203)	Voltage Transformer with motor operated isolation device of rated insulation	transformer mentioned in SLD. Please clarify the same.	
304.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.1.2 Page (182/203)	Voltage Transformer with motor operated isolation device of rated insulation	We understand the requirement calls for isolation while performing HV testing on the cables so voltage transformer with manual operation device is acceptable. Kindly confirm.	Corrigendum is being issued separately.
305.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.1.2 Page (182/203)	Voltage Transformer- 1 No	We understand VT without any isolating link is to be considered under this line item. Kindly confirm.	Corrigendum is being issued separately.
306.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.1.2 Page (182/203)	Each incomer Bay (2 Nos.) consisting of: Voltage Transformer with motor operated isolation device of rated insulation	We understand that the requirement calls for isolation while performing HV testing on the cables so voltage transformer with manual operation device is acceptable.	Corrigendum is being issued separately.
307.	Volume-IV - Technical	Chapter-12 Sub-Clause	Sub-Clause 12.21.1.2 - Each incomer Bay (2 Nos.) consisting of;	a) As per referred clause, Voltage Transformer with motor operated	a. Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specification	12.21.15.3 Page (182/203)	Voltage Transformer with motor operated isolation device of rated insulation Drawing - TYPICAL SLD FOR 132 KV RSS - GIS TYPE WITH PROTECTION (SHEET 2 OF 2) Item No. A.1.1 - Supply and erection including testing and commissioning of 132KV SF6 Gas insulated incoming feeder Bay each comprising of SF6 gas insulated circuit breaker, current transformer, Bus PT modules, Two bus bar disconnectors with grounding switch, line disconnector with safety grounding switch, high speed fault making grounding switch,SF6 gas monitoring system for complete bay,LCC,Cable termination,SF6 to Air bushings and Accessories with GIS etc, with complete incoming feeder bay module	isolation device of rated insulation shall be provided for incomer line bay. However, as per referred SLD, Voltage transformer is not shown with motor operated isolation device of rated insulation. In this regard, we propose manual operated isolation device instead of motor operated isolation device for incoming bay voltage transformer. Please accept the same. b) Further, as per referred BPS line item, Bus PT module is mentioned as part of Incomer line bay. We understand that the same is typo error and it shall be read as Line PT module. Please confirm	b. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
308.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.1.15 Page (182/203)	Each Bus VT Module (2 No) consisting of: Voltage Transformer- 1 No	We understand VT without any isolating link is to be considered under this line item. Kindly confirm.	Separate Isolator is not required for VTs. The Tender Conditions shall prevail.
309.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.1.3 Page (182/203)	Each Transformer Feeder Bay (4 Nos.) consisting of. Drawing - TYPICAL SLD FOR 132 KV RSS - GIS TYPE WITH PROTECTION (SHEET 2 OF 2) Drawing No. TYPICAL 132kV/33kV RSS (GIS) SWITCHYARD EQUIPEMENT LAYOUT (SHEET - 01 OF 03) - I202-BIG-TRP-00-DWG-RSSLYT1-00017 Price schedule. Bill No. 1.2 Item No. A.1.3	As per referred clause, 4 Nos. of 132kV GIS transformer bays are indicated. However, as per referred SLD & Price schedule, only two transformer bays shall be provided. In this regard, please check and confirm the number of transformer bays at each RSS.	Corrigendum is being issued separately.
310.	Volume-IV - Technical	Chapter-12 Sub-Clause	Sub-Clause 12.21.1.5 Each Bus VT Module (2 No) consisting of.	There is no line item in the referred price schedule for Bus VT module.	It is covered under price schedule. Refer BoQ



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specificatio n	12.21.1.15 Page (182/203)	Voltage Transformer- 1 No Bus Earthing Switch- 1 No.	Please check and add a separate line item for the same.	explanatory notes corresponding to BOQ Bill Nos.IN-1.2 & IN-1.3 of Vol. VII. The Tender Conditions shall prevail.
311.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.6 Page (182/203)	Internal insulation level between live parts and earth when the pressure of the gas goes to the atmospheric pressure should not be less than 1.2*132/1.732kV.	Insulation strength at minimum gas pressure shall be as per IEC standards for the 145kV GIS. Kindly confirm the same.	Corrigendum is being issued separately.
312.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.9 Page (183/203)	The termination arrangement of 132 kV system	Please confirm whether supply and laying of 132kV cables (to be laid between 132 kV GIS and Power Transformer) is in scope of Tenderer or not.	Corrigendum is being issued separately.
313.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.9 Page (183/203)	The termination arrangement of 132 kV system	Please share the outdoor cable trench section where the 132kV Cables are proposed to be laid.	The contractor shall provide 132 kV cable trench at RSS(AIS/GIS) with proper interface with PSA regarding 132kV cable trench section.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
314.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.9 Page (183/203)	The termination arrangement of 132 kV system	Kindly clarify whether supply and installation of Termination Kits for 132 kV cable for all sections (Incomer to GIS, GIS to Transformers) is in the scope of Tenderer or not.	Corrigendum is being issued separately.
315.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.9 Page (183/203)	The termination arrangement of 132 kV system	In case of supply & installation of Termination Kits for 132kV Cables are excluded from Tenderer scope, please confirm the mode of operating/mounting the female part in the GIS.	Corrigendum is being issued separately.
316.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.9 Page (183/203)	Drawing - TYPICAL SLD FOR 132 KV RSS - GIS TYPE WITH PROTECTION (SHEET 2 OF 2) Drawing No. TYPICAL 132kV/33kV RSS (GIS) SWITCHYARD EQUIPEMENT LAYOUT (SHEET - 01 OF 03) - I202-BIG-TRP-00-DWG- RSSLYT1- 00017 Price schedule. Bill No. 1.2	As per referred price schedule, both Cable termination & SF6 to Air bushings are mentioned for Incomer line bay. However, as per referred SLD and layout, incomer line bay is shown with cable termination only. GIS bus duct & SF6 to air bushing are not shown. In this regard, please check and clarify the type of termination for GIS bays whether it is cable connected	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			Item No. A.1.1 - Supply and erection including testing and commissioning of 132KV SF6 Gas insulated incoming feeder Bay each comprising of SF6 gas insulated circuit breaker, current transformer, Bus PT modules, Two bus bar disconnectors with grounding switch, line disconnector with safety grounding switch, high speed fault making grounding switch,SF6 gas monitoring system for complete bay,LCC,Cable termination,SF6 to Air bushings and Accessories with GIS etc, with complete incoming feeder bay module	(or) busduct connected? Please check and issue suitable amendments as applicable.	
317.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.9 Page (183/203)	The termination arrangement of 132 kV system be designed for two such cables, so that additional cables can be terminated later, if required. The outgoing connections from GIS shall be in gas filled enclosure Item No. A.1.3 - Supply and erection including testing and commissioning of	As per referred price schedule, Cable termination & SF6 to Air bushings are mentioned for 132kV Transformer bay. However, as per referred SLD and layout, transformer bay is shown with cable termination only. GIS bus duct & SF6 to air bushing are not shown. In this regard, please check and clarify the type of termination for	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			132KV SF6 Gas insulated transformer Bay each comprising of SF6 gas insulated circuit breaker, current Transformer, Two bus bar disconnectors with grounding switch,SF6 gas monitoring system for complete bay, LCC, Cable termination,SF6 to Air bushings and Accessories with GIS etc, with complete transformer bay module Drawing - TYPICAL SLD FOR 132 KV RSS - GIS TYPE WITH PROTECTION (SHEET 2 OF 2) Drawing No. TYPICAL 132kV/33kV RSS (GIS) SWITCHYARD EQUIPEMENT LAYOUT (SHEET - 01 OF 03) - I202-BIG-TRP-00-DWG-RSSLYT1-00017 Price schedule. Bill No. 1.2 Item No. A.1.3	transformer bays whether it is cable connected or Busduct connected? Further, if transformer bay is cable connected, please furnish the detailed specification for 132kV cable, as the same is not available in the technical specification. Also please add a sperate line item in the price schedule for EHV cable between 132kV GIS and transformer.	



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
318.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.3 Page (183/203)	Viewing windows shall be provided in the circuit breaker, disconnect and grounding switch modules for inspection	Viewing windows are only applicable for DS,ES and not applicable for CB as the same is arcing chamber. Request your concurrence.	Corrigendum is being issued separately.
319.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.3 Page (183/203)	The switchgear and all its components and accessories shall be designed for minimum maintenance during service. The manufacturer shall state in maintenance plan the minimum interval between minor inspections (which will be restricted to visual checking and adjustments of external parts only) and major inspection /overhaul, including refilling or replenishment of gas and cleaning of the contaminant or filter in the circuit breaker chamber(s). Viewing windows shall be provided in the circuit breaker, disconnect and grounding switch modules for inspection.	Viewing windows are only applicable for DS, ES and not applicable for CB as the same is the arcing chamber. Request your concurrence.	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
320.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.8 Page (183/203)	GIS should be of modular design, and it should be possible to add feeder bays for two additional transformers, if required the layout of GIS equipment and transformers should show space earmarked for the future provision.	We understand future extension of GIS is not applicable in line with tender SLD and tender layout. Kindly confirm.	Corrigendum is being issued separately.
321.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.8 Page (183/203)	GIS should be of modular design, and it should be possible to add feeder bays for two additional transformers, if required the layout of GIS equipment and transformers should show space earmarked for the future provision.	We understand future extension of GIS is not applicable in line with tender SLD and tender layout. Kindly clarify.	Corrigendum is being issued separately.
322.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.9 Page (183/203)	The termination arrangement of 132 kV system be designed for two such cables, so that additional cables can be terminated later, if required.	We understand for both line and transformer bay single run of cable are applicable. Please confirm.	Corrigendum is being issued Separately.
323.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.12 Page	The conductors/bus bars shall be of copper and enclosure shall be made of Aluminium Alloy.	Busbar and conductors are of Aluminium in case of EHV GIS. Further also note same has been designed and type tested in line	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		(184/203)		with IEC 62271-203 with short circuit current of 40kA 3 sec. So copper conductor requirements are not envisaged. Please modify the requirement.	
324.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.10 Page (184/203)	Feeder earthing switch shall be fast acting type and isolated from earthed enclosures and shall permit testing of switchgear. It shall also be possible to carryout high voltage without disconnecting the cables. Suitable adapter for such testing should be provided.	Some GIS OEMs have confirmed to provide 10kV DC with stand able insulated earthing switches to carry out insulation tests on cable. If the same is required then test adaptor is not applicable. Please confirm.	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.
325.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.12 Page (184/203)	The conductors/bus bars shall be of copper and enclosure shall be made of Aluminium Alloy.	Kindly confirm that the Busbar enclosure and conductors both of Aluminium are also accepted.	Corrigendum is being issued separately.
326.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.19 Page	The Operating Mechanism for the circuit breaker shall be Spring/Spring or to give highest reliability to the system, following loss of supply voltage the	During loss of supply voltage the operating mechanism is intended to perform 1 C-O operation only. However, it can achieve a duty cycle	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		(184/203)	operating mechanism shall have local storage sufficiency for a duty cycle of O –0.3 sec CO–3 min- CO without the need for recharging	of O –0.3 sec CO–3 min-CO at rated control voltage. Kindly confirm the same.	
327.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.24 Page (185/203)	The Local Control Cubicles shall be integrated with the GIS and should house IEC 61850 compliant Bay Control Unit (BCU) which should be SCADA compatible. Free standing LCC with conventional system for monitoring and indication shall not be accepted.	We would like to bring in your notice that, both standalone and integrated LCC are acceptable to maximum utilities across India. And moreover standalone LCC gives the operational convenience over integrated one. So in order to have fair and more competitive tender, we request you, towards allowing both standalone and integrated LCC and giving GIS manufacturers a fair chance to compete.	Corrigendum is being issued separately.
328.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.24 Page (185/203)	The Local Control Cubicles shall be integrated with the GIS and should house IEC 61850 compliant Bay Control Unit (BCU) which should be SCADA compatible. Free standing LCC with conventional system for monitoring and	Please confirm the DI and DO required in BCU. We understand if BCU requirement in LCC is envisaged then hardwire interlock requirement in LCC is not envisaged.	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			indication shall not be accepted.	Further we propose for bay mounted LCC instead of ground mounted which provide better flexibility and ease in operation.	
329.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.2.24 Page (185/203)	The Local Control Cubicles shall be integrated with the GIS and should house IEC 61850 compliant Bay Control Unit (BCU) which should be SCADA compatible. Free standing LCC with conventional system for monitoring and indication shall not be accepted.	Please confirm the DI and DO required in BCU. We understand if BCU requirement in LCC is envisaged then hardwire interlock requirement in LCC is not envisaged. Further we propose for bay mounted LCC instead of ground mounted which provided better flexibility and ease in operation.	Corrigendum is being issued separately
330.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.3.1 Page (186/203)	Offered numbers and location of UHF sensors shall be submitted based on above said criteria along with attenuation calculation for review/approval of the Engineer.	Quantity of PD sensors are on the basis of GIS OEM study in line with CIGRE requirement. Approval of calculation is not applicable. However, we assure if in case there is any issue at site during sensitivity check we shall assure correct rectification for the same.	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
331.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.3.1 Page (186/203)	Adequate number of UHF sensors shall be provided in the offered GIS for detection of Partial discharge (of 5 pC and above) as per IEC 60270. The number and location of these sensors shall be based on laboratory test on typical design of GIS as per recommendations of CIGRE Document No. 654. (Application guide for sensitivity verification for uhf partial discharge detection system for GIS). Offered numbers and location of UHF sensors shall be submitted based on above said criteria along with attenuation calculation for review/approval of the Engineer. Further UHF sensors shall necessarily be provided near VT compartments.	Quantity of PD sensors are on the basis of GIS OEM study in line with CIGRE requirement. Approval of calculation is not applicable. However, we assure if in case there is any issue in site during sensitivity check we shall assure correct rectification for the same. Request for your acceptance.	Corrigendum is being issued separately.
332.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.6.10 Page	Gas leakage should be less than 0.1% / year. The material for the seals shall be non- deteriorating	We understand GIS leakage rate requirement is 0.1%, that means Clause 12.21.2.15 is not applicable. Please confirm.	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		(190/203)			
333.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.6.10 Page (190/203)	Gas leakage should be less than 0.1% / year. The material for the seals shall be non- deteriorating	We understand GIS leakage rate requirement is 0.1%, that means Clause 12.21.2.15 is not applicable. Kindly confirm.	Corrigendum is being issued separately.
334.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.9.1.2 Page (191/203)	The Circuit Breaker shall be operated by a motor charged spring's stored energy. Both opening and closing operations shall be done by the stored energy of spring (s)	We understand both opening and closing mechanism should be operated only with Spring mechanism. Other mechanism types like Pneumatic and hydraulic are not acceptable. Please confirm.	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.
335.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.9.1.2 Page (191/203)	Both opening and closing operations shall be done by the stored energy of spring (s)	We understand both opening and closing mechanism should be operated only with Spring mechanism. Other mechanism types like Pneumatic and hydraulic are also acceptable. Kindly clarify.	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.
336.	Volume-IV - Technical	Chapter-12 Sub-Clause	Electrical and Mechanical interlocks shall be provided for absolute and	Mechanical interlocks are not applicable in case of EHV GIS.	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specificatio n	12.21.11.1 Page (194/203)	positive protection against potentially harmful mal operations of the switchgear. Electrical interlocking shall be fail-safe type.	Request you to please modify the requirement accordingly.	
337.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.11.1 Page (194/203)	Electrical and Mechanical interlocks shall be provided for absolute and positive protection against potentially harmful mal operations of the switchgear.	Mechanical interlocks are not applicable in case of EHV GIS.	Corrigendum is being issued separately.
338.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.15.3 Page (196/203)	Normally isolable surge arrestors on the Bus Bar should be used. This will facilitate quick isolation and coupling whenever bus bars are required to be exposed to high voltage test.	We understand the surge arrestor with internal isolating link to be provided which can be isolated by removing SF6 gas. Kindly confirm.	Corrigendum is being issued separately.
339.	Volume-IV - Technical Specificatio n	Chapter-12 Sub-Clause 12.21.15.3 Page (196/203)	Normally isolable surge arrestors on the Bus Bar should be used. This will facilitate quick isolation and coupling whenever bus bars are required to be exposed to high voltage test.	We understand the surge arrestor with internal isolating link to be provided which can be isolated by removing SF6 gas.	Corrigendum is being issued separately.
340.	Volume-IV - Technical	Chapter-13, Sub-Clause		Please specify the distance between the following:	The bidder is advised to visit site, carry out survey for the



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specificatio n	13.1.2.2 Page (2/21)		a) Gandhi Nagar Depot RSS to Gandhi Nagar Station b) Gandhi Nagar Depot RSS to Depot ASS c) Gandhi Nagar Depot RSS to Depot TSS d) Gandhi Nagar Depot ASS to OCC ASS e) Khajrana Square RSS to Khajrana Square station f) ISBT/MR10 Flyover RSS to ISBT/MR10 Station	said section to evaluate actual site conditions and route length requirements.
341.	Volume-IV - Technical Specificatio n	Chapter – 13 Sub-Clause 13.2.1.2 Page (3 /21)	In addition to 33 kV cables, control cables of suitable sizes and rating for inter tripping and earthing switch interlockings shall be laid alongside 33 kV cables. These control cables shall be FRLS for elevated and at-grade / depot sections and shall be FRLSOH for UG section.	We envisage only pilot wire FO cable between two ASS common for both protection & interlocking. Please specify if any other cable is required for interlocking of 33kV switchgear.	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.
342.	Volume-IV - Technical Specificatio n	Chapter-13 Sub-Clause 13.2.1.2 Page (3 /21)	In addition to 33 kV cables, control cables of suitable sizes and rating for inter tripping and earthing switch interlockings shall be laid alongside 33 kV cables. These control cables shall	Bidder requests to accept other proven methods for achieving the required interlocking/inter tripping. The Contractor will submit detailed proposal to the Engineer for approval	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			be FRLS for elevated and at-grade / depot sections and shall be FRLSOH for UG section. Separate control cables for traction and auxiliary networks shall be used. The Contractor shall submit detailed proposal including technical particulars of these control cables to the Engineer for approval. The inter tripping cable shall be OFC.	during design stage.	prevail.
343.	Volume-IV - Technical Specificatio n	Chapter – 13: Sub- Clause 13.2.3.1, Page (4 /21)	Table 13.2: Short circuit current carrying capacity of conductor - 25kA for 1 sec	As per referred clause, Short circuit current carrying capacity of 33kV cable conductor shall be 25kA for 1sec. The 33kV cable sizes are 240 Sq. mm and 95Sq. mm Short circuit current carrying capacity of the 95 Sq.mm Copper conductor is 13.6kA for 1 sec. Hence, we understand that minimum cross section of the cable shall be decided based on the breaker opening time instead of rated short	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				circuit duration (1 sec). Please confirm.	
344.	Volume-IV - Technical Specificatio n	Chapter-13 Page (5 /21) Chapter-12, Sub-Clause 12.3.10.7.3 Page (27 /203)	Table 13.2: 33 KV SI No. 12 - Short circuit current carrying capacity of metallic screen - 11kA for 1 sec Sub-Clause 12.3.10.7.3 The neutral end shall be fully insulated and earthed through a 19 Ohm resistor in order to limit the current to a maximum of 1000 A admissible into the 33 kV cable screen.	As per referred clause, Short circuit current carrying capacity of metallic screen for 33kV cable shall be 11kA for 1 sec. However, as per Sub-Clause 12.3.10.7.3, Transformer secondary shall be NGR earthed which shall restrict current up to 1000A in the metallic screen of 33kV cable. In this regard, we request MPMRCL to recheck the requirement of Short circuit current carrying capacity of metallic screen for 33kV cable as in all other metro like DMRL, CMRL, JMRC, 33kV cable screen is designed for 1kA for 3 sec. Only.	Corrigendum is being issued separately.
345.	Volume-IV - Technical Specificatio n	Chapter-13 Sub-Clause 13.2.3. Table 13.2: 33 KV Page (5 /21)	SI No. 10 - Short circuit power - 40MVA	Please clarify whether the referred clause is applicable for 1Cx95 Sq.mm copper cable also which shall be used between 33kV switchgear & dry type transformer/rectifier.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
346.	Volume-IV - Technical Specificatio n	Chapter-13 Sub-Clause 13.2.3. Table 13.2: 33 KV Page (5 /21)	Rated voltage - U0/U (Um) = 19 / 33 (36) kV	As per IEC 60502 -2, 33kV cable rated voltage grade is 18/30 (36kV) instead of 19/33 (36)kV. Please accept the 33kV cable voltage grade as per IEC 60520-2 as the same is accepted in other metro also.	The Tender Conditions shall prevail.
347.	Volume-IV - Technical Specificatio n	Chapter-13 Sub-Clause 13.2.3.4 Table 13.3: 33 KV Page (6 /21)	33 kV Cable Rating - Power Tr. To RSS panel	Please clarify whether referred short circuit power is for 33kV cable conductor or metallic screen?	Referred short circuit power is for 33kV cable conductor. The Tender Conditions shall prevail.
348.	Volume-IV - Technical Specificatio n	Chapter-14 Sub-Clause 14.1.2 Page (3/70)	All the underground stations shall be provided with Two ASSs each at either end of the platform having ASS1- 1x 2500 kVA and ASS2- 1x 2500 kVA Transformer. At stations having TSS, the TSS and one ASS are housed in the same room.	 a) Please specify the Underground station platform length as the same is required for LT cable estimation between ASS-1 & ASS-2. b) Please furnish the typical UG station platform level layout by showing the location of ASS-1 & ASS-2 room. c) Please furnish the 	The contractor shall interface with UG Station Building Contractor. However the typical platform length is 140m and typical UG station box is 200m (approx.). The tender condition shall



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				elevated station concourse level layout by showing the location of ASS room. d) Please specify the platform length for typical elevated stations.	prevail.
349.	Volume-IV - Technical Specificatio n	chapter-14, Sub-Clause 14.1.3 Page (4/70)	Typical SLD for Auxiliary substation Type-E & F - Depot ASS, Depot TSS & OCC ASS	Please specify the number of 33kV bays need to be provided at depot ASS, Depot TSS & OCC TSS.	Corrigendum is being issued separately.
350.	Volume-IV - Technical Specificatio n	Chapter-14, Sub-Clause 14.1.3 Page (4/70) Typical SLD for Auxiliary substation Type-D Tender drawings -	Gandhi Nagar ASS cum TSS Kharjana Square ASS cum TSS	a) As per referred power supply SLD, 3 Number of auxiliary dry type (1x800KVA, 2X2000kVA) transformers are shown for Gandhi Nagar & Kharjana square. However, as per Table 2.1: ASSs, each elevated station shall be provided with 2 nos. of 500kVA transformer only. Please check and clarify.	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		33kV Power supply SLD for Indore metro yellow line - I202- BIG-TRP-00- DWG- ATSSLD1- 00103		b) As per referred power supply SLD, 13 nos. of bays are shown for Gandhi Nagar ASS cum TSS & Kharjana Square ASS cum TSS. However, as per Sub-Clause 14.1.3, Type-D ASS shall be provided with 11 bays only. Please check and revise the power supply SLD accordingly.	
351.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause - 14.2.2.3 Page (6/70)	Table 14.1: 33 KV Switchgear Rating	As per Typical protection SLD in Volume VI we have considered rated normal current as 1250A for RSS, TSS, ASS.	The rated normal current as 1250A for RSS, TSS, ASS. The tender condition shall prevail.
352.	Volume-IV - Technical Specificatio n	Chapter-14 - , Sub-Clause 14.2.1.4 Page (6/70)	14.2.1.4 Ring coupling breakers at designated station for transfer of power from one section/line to other section/line for CTO operation	Please clarify for which Station the referred specification clause is applicable?	This shall be as per AC simulation results which will be shared with the Contractor. The tender condition shall prevail.
353.	Volume-IV - Technical	Chapter-14 Sub Clause -	Table 14.1: 33 KV Switchgear Rating	As per Typical protection SLD in Volume VI we have considered bus	The rated normal current as



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specificatio n	14.2.2.3 Table 14.1 Page (7/70)		bar current as 1250A for RSS, TSS, ASS.	1250A for RSS, TSS, ASS. The tender condition shall prevail.
354.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause- 14.2.2.3 Table 14.1 Page (7/70)	Table 14.1: 33 KV Switchgear Rating	Kindly clarify as SLD and Table 14.1 is contradictory with respect to Rated Short Circuit Withstand Capacity.	Corrigendum is being issued separately
355.	Volume-IV - Technical Specificatio n	Chapter-14 Sub-Clause 14.2.2.3 Page (7/70) Chapter-14 Sub Clause 14.2.6.3 Page (25/70)	Table 14.1: 33 KV Switchgear Rating: 10. Rated short circuit withstand capacity 25kA for 1 Sec Table 14.2: GTP for 33 kV Vacuum CB 10. Allowable overcurrent for 1 second 14kA	From the calculations used in other metro system and as per Sub-Clause 14.2.6.3, Bidder understands that rated short circuit withstand capacity will be 14kA for 1 Sec for 33kV Switchgear. Please amend the Sub-Clause 14.2.2.3.	Corrigendum is being issued separately.
356.	Volume-IV - Technical Specificatio	Chapter-14 Sub Clause- 14.2.2.7	Switchgear Cubicles	BOQ IN3.1 Item No A.1 is contradictory with respect to panel quantity and station quantity. Kindly	Panel Quantity has been carried out by considering all station at Main line, Depot



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	n	Page (9/70)		clarify.	TSS, OCC ASS and Depot ASS. The Tender Conditions shall prevail.
357.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause - 14.2.2.7.3 Page (9/70)	The auxiliary contacts shall be of adequate rating (5A minimum) and shall be provided in sufficient numbers with about 30% spares, with a minimum of 5 NO and 5 NC. The contractor shall propose designs for approval by the Engineer.	As per some OEM's design, 6 NO + 6 NC auxiliary contacts with 4A rated current at 110V DC and additional spare contacts are obtained by contact multiplier relays. Kindly confirm acceptance of same.	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.
358.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause- 14.2.2.7.4 Page (9/70)	Three display lamps for "voltage on" fed by capacitive dividers and annunciation lamps shall be installed on the front face of the cubicle	Kindly clarify in which feeder capacitive voltage divider with voltage presence indicator is required.	Feeder capacitive voltage divider with voltage presence indicator is required for all panels
359.	Volume-IV - Technical Specificatio n	Chapter-14 Sub-Clause 14.2.4.1 Page (15/70)	Table 14.3: 33 kV Breaker Rating : SI No. 14 : Total arc interruption duration - Less than 3 cycle SI No. 12 : CB Closing time - <80ms	Total arc interruption duration is mentioned as less than 3 cycle which is contradictory with CB closing time which is mentioned as <80msec for 33kV breaker. Please check & confirm.	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
360.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause - 14.2.5.1 Page (22/70)	14.2.5 METERING	As per Typical protection SLD in Volume VI we have not considered any Ammeter, Voltmeter and Energy meter of CL 0.2S accuracy with summation CT for transformer feeder.	Corrigendum is being issued separately
361.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause- 14.2.5.1 Page (22/70)	Table 14.2: GTP for 33 kV Vacuum CB	VA burden of CT/PT shall be selected suitable to cater actual load of relay / meter present in respective 33kV AIS switchgear panel. Suitable burden calculation shall be submitted during detailed engineering. Please confirm acceptance.	The Contractor shall submit during construction the burden calculation on the basis of actual load of relay / meter for Engineer's approval. The Tender Conditions shall prevail.
362.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause 14.3.3 Page (33/70)	Secondary Voltage at full load & PF 0.8 lag	The full load voltage depends on regulation, so will be according to that	The Contractor shall submit GTP as per technical requirement given in Table No 14.4 Chapter 14 of Vol-IV Technical Specification for approval of Engineer.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
					The Tender Conditions shall prevail.
363.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause 14.3.3 Page (33/70)	33 kV side fault level - 16kA for 1 Sec	This fault level is not applicable to transformer and the transformer fault level shall be as per IS2026-5	The Contractor shall submit GTP as per technical requirement given in Table No 14.4 Chapter 14 of Vol-IV Technical Specification for approval of Engineer. The Tender Conditions shall prevail.
364.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause 14.3.3 Page (33/70)	Short circuit rating for secondary side (at all tapping	This shall be as per IS 2026-5	The Contractor shall submit GTP as per technical requirement given in Table No 14.4 Chapter 14 of Vol-IV Technical Specification for approval of Engineer. The Tender Conditions shall prevail.
365.	Volume-IV - Technical	Chapter-14 Sub -Clause	Efficiency values	Shall be as per our submitted GTP	The Contractor shall submit GTP as per technical



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specificatio n	14.3.3 Page (34/70)			requirement given in Table No 14.4 Chapter 14 of Vol-IV Technical Specification for approval of Engineer.
					The Tender Conditions shall prevail.
366.	Volume-IV - Technical Specificatio n	Chapter-14 Sub -Clause 14.3.3 Page (34/70)	Overload rating	Shall be as per IEC 60076-12	The Contractor shall submit GTP as per technical requirement given in Table No 14.4 Chapter 14 of Vol-IV Technical Specification for approval of Engineer. The Tender Conditions shall prevail.
367.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause 14.3.3 Page (34/70)	Impedance	Impedance shall be with tolerance	The Contractor shall submit GTP as per technical requirement given in Table No 14.4 Chapter 14 of Vol-IV Technical Specification for approval of Engineer.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
					The Tender Conditions shall prevail.
368.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause 14.3.4.4 Page (35/70)	The copper terminal bars of electrolytic grade copper as per IS 1897-2008 and the terminal bars shall be tinned with suitable thickness (not less than 50 micron)	Terminals shall be of Aluminium and tinning is not required	The Tender Conditions shall prevail.
369.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause 14.3.4.4 Page (35/70)	The transformer shall be mounted on bi- directional type flanged wheels for forward and across wise movement on 1000mm gauge rail.	The gauge shall be as per our standard practise	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.
370.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause 14.3.4.5 Page (35/70)	The transformer shall be of the rated KVA without exceeding the rated temperature on any tapping at a voltage of ±5% of the rated voltage of that tapping	The transformer temperature rise guaranteed shall be at rated tap.	The Tender Conditions shall prevail.
371.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause- 14.3.4.6.2 Page (36/70)	A metal sheet shall be installed at 10 to15 cm from the top grating to provide	As the transformer top cover is fully closed and the termination is from top side this cannot be provided.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
372.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause - 14.3.4.9 Page (36/70)	Painting	Powder coating shall be done as per our standard practise with an average thickness if 120 microns	Any upgraded design may be submitted to meet the specified IP requirement to the Engineer for approval
373.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause - 14.3.4.6.1 Page (36/70), Sub Clause - 14.3.5.3 Page (37/70) & Sub Clause - 14.3.5.4 Page (37/70)	The door shall be provided with a mechanical system interlock,	Mechanical system interlock is not in our scope of supply, if required only mounting provision shall be provided	The Tender Conditions shall prevail.
374.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause- 14.3.4.10 Page (37/70)	Nuts & Bolts	All hardware shall be of stainless steel	The Tender Conditions shall prevail.
375.	Volume-IV - Technical	Chapter-14 Sub Clause-	Table 14.5. 33kV/415 V Auxiliary Transformer GTP	As per IS2026-11 & IEC 60076-11 the impulse voltage is not applicable	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specificatio n	14.3.6 Page (39/70)	20. Lightning impulse for secondary voltage - 3.5kV	for voltages less than 1kV.	
376.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause - 14.3.6 Page (39/70)	GTP for 33kV/415 V Auxiliary Transformer	Only Annexure -4- Technical standard for auxiliary transformer is referred and no other documents are considered	Refer chapter 14 of Vol-IV for detail technical specification of Auxiliary Transformer.
377.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause 14.4.3.3.2 Page (43/70)	SI No. 3 - Rated voltage - 120V	As per referred clause, battery rated voltage shall be 120V. However, standard DC voltage for battery shall be 110V only. Please check and confirm.	Nominal battery voltage shall be 110V DC. The Tender Conditions shall prevail.
378.	Volume-IV - Technical Specificatio n	Chapter-14 Sub Clause - 14.4.4.3.2 Page (43/70)	Rating of battery charger	1) Kindly confirm the battery charger ratings (in Amps) for the following battery ratings: a) 110V - 300AH Ni-CD Battery b) 110V - 180AH Ni-CD Battery	Battery charger ratings are as under: a) 100Amp b) 50Amp The Tender Condition shall prevail.
379.	Volume-IV - Technical	Chapter-15, Sub-Clause	The running rail potential shall be compliant to EN 50122-	As per EN 50122-1, it will be 160V for 1s. Request you to amend the clause	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specificatio n	15.1.2.1.3 Page (6/112)	1:2011+A1:2011. Maximum Permanent Rail potential allowed on mainline is 120 V. Higher values are allowed for short periods only as blow: a. 150 V for a 300 s time window b. 170V for 1s	accordingly.	
380.	Volume-IV - Technical Specificatio n	Chapter-15 Sub-Clasue 15.1.4.5.1 Page (8/112)	Since RSS is physically located in the depot common for both the lines, the depot 33 kV supply for TSS and ASS is directly drawn from respective RSS in the two dedicated 33 kV ring feeders in open ring mode. TYPE F: 2 x 2000 kVA This configuration is applicable to the ASS at the Depot at Gandhi Nagar in Indore Metro which are fed directly from the RSS.	From tender layout, bidder understands that Depot TSS/ASS building is not part of RSS building. Please share the Plot plan with demarcation of the Depot TSS/ASS and layout of the same in order to estimate the 33kV & other cable laying and accessories.	Corrigendum is being issued separately.
381.	Volume-IV - Technical Specificatio n	Chapter 15 - Sub-Clause 15.3.2.1 Page (13/112)	Standards	There is a general reference to ANSI 4C 37.4 related to High-Speed Circuit Breaker. Request to kindly refer to EN and IEC standards only. Kindly confirm.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
382.	Volume-IV - Technical Specificatio n	Chapter 15 - Sub-Clause 15.3.2.1 - Page (13/112)	Standards	There is a general reference to ANSI 4C 37.4 related to High-Speed Circuit Breaker. Request to refer to EN and IEC standards only. Request your Confirmation.	Please refer Clause 15.3.2.1, Vol-IV Technical Specifications. The Tender Conditions shall prevail.
383.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause . 15.3.2.1 Page (13/112)	Sub-Clause 15.3.2.1 - Applicable Standards	There is a general reference to ANSI 4C 37.4 related to High-Speed Circuit Breaker. Request to refer to EN and IEC standards only. Kindly consider.	Please refer Clause 15.3.2.1, Vol-IV Technical Specifications. The Tender Conditions shall prevail.
384.	Volume-IV - Technical Specificatio n	Chapter 15 - Sub-Clause 15.3.5.1.6 Page (18/112)	Front door shall also be able to close and have provision for interlocking and pad locking at all switchgear track position.	Request to kindly allow for door design in line with EN standards. Designs not requiring any separate front door shall also be allowed. Propose to kindly accept EN 50123-6 clause instead of mentioned tender clause for better competition: "Covers and doors which are part of enclosure shall be metallic if the enclosure is metallic. When they are closed, they shall provide the degree of protection specified for	Corrigendum is being issued separately



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				the enclosure." Please refer to clause 6.10.2 - Partitions of EN 50123-6. Request for clause modification in line with EN Standards as per prevailing practices. Existing clause is very OEM specific and is restricting participation.	
385.	Volume-IV - Technical Specificatio n	Chapter 15 Sub Clause. 15.3.5.1.6 Page (18/112)	Chapter 15 - Clause 15.3.5.1.6 - Front door Front door shall also be able to close and have provision for interlocking and pad locking at all switchgear track position.	Request to kindly allow for door design in line with EN standards. Designs not requiring any separate front door shall also be allowed. Suggest to accept EN 50123-6 clause instead of mentioned tender clause for better competition: "Covers and doors which are part of enclosure shall be metallic if the enclosure is metallic. When they are closed, they shall provide the degree of protection specified for the enclosure." Please refer to clause 6.10.2 - Partitions of EN 50123-6.	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
386.	Volume-IV - Technical Specificatio n	Chapter 15 - Sub-Clause 15.3.5.1.6 - Page (18/112)	Front door shall also be able to close and have provision for interlocking and pad locking at all switchgear track position.	Request to kindly allow for door design in line with EN standards. Designs not requiring any separate front door shall also be allowed. Suggest to accept EN 50123-6 clause instead of mentioned tender clause for better competition: "Covers and doors which are part of enclosure shall be metallic if the enclosure is metallic. When they are closed, they shall provide the degree of protection specified for the enclosure." Please refer to clause 6.10.2 - Partitions of EN 50123-6. Request for clause modification in line with EN Standards as per prevailing practices. Existing clause is very OEM specific and is restricting participation.	Corrigendum is being issued separately.
387.	Volume-IV - Technical Specificatio	Chapter 15 - Sub-Clause 15.3.5.6.1	Description of the cubicles.	Request to add: "There shall be full panel to panel segregation between busbar & circuit breaker compartment	Any updated design shall be proposed by the Contractor to the Engineer for approval.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	n	Page (20/112)		from all sides in a cubicle by means of metal partition & insulating bushings." Request your Confirmation.	The Tender Conditions shall prevail.
388.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause 15.3.5.6.3.2 (Page (20/112)	it shall have end-boxes for 750 VDC cables and this box shall be supplied complete with all the necessary materials for installing the cable and completely making the end connection.	Feeder cables are normally terminated in the rear compartment of the DC switchgear panel. Is it expected to have a specific cable compartment segregated from the bus-bar compartment in the rear part of the DC switchgear panel. Request your Confirmation.	The Tender Conditions shall prevail.
389.	Volume-IV - Technical Specificatio n	Chapter 15 Sub- Clause 15.3.5.6.3.2 Page (20/112)	it shall have end-boxes for 750 VDC cables and this box shall be supplied complete with all the necessary materials for installing the cable and completely making the end connection.	Feeder cables are normally terminated in the rear compartment of the DC switchgear panel. Is it expected to have a specific cable compartment segregated from the bus-bar compartment in the rear part of the DC switchgear panel. Kindly clarify.	The Tender Conditions shall prevail.
390.	Volume-IV -	Chapter 15	Clause 15.3.5.6.1 - Cubicle	Request to add: "There shall be full	Any updated design shall be



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Technical Specificatio n	Sub Clause No 15.3.5.6.1 Page (20/112)	Compartments Description of the cubicles.	panel to panel segregation between busbar & circuit breaker compartment from all sides in a cubicle by means of metal partition & insulating bushings."	proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.
391.	Volume-IV - Technical Specificatio n	Chapter 15 Sub Sub- Clause 15.3.5.6.5.1 Page (21/112)	Clause 15.3.5.6.5.1 - LV Compartment LV compartment shall have a mimic diagram and an HMI display.	Request to change to HMI display only.	The Tender Conditions shall prevail.
392.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause 15.3.5.6.5.1 Page (21/112)	LV compartment shall have a mimic diagram and an HMI display.	Request to change to HMI display only. Request for clause modification.	The Tender Conditions shall prevail.
393.	Volume-IV - Technical Specificatio n	Chapter 15- Sub-Clause 15.3.5.6.5.1 Page (21/112)	LV compartment shall have a mimic diagram and an HMI display.	All Possible indications are provided through HMI Display only. Request to kindly allow for HMI display only. Conventional Mimics are not envisaged in today's times.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
394.	Volume-IV - Technical Specificatio n	Chapter 15 - Clause 15.3.9.1 Page (24/112)	The circuit breaker operating mechanism shall be Electro-magnetic closing and with electric or magnetic holding as approved by Engineer or solenoid actuating mechanism which shall be so designed as to enable continuous sequence of opening and closing operations through a control switch as long as power is available.	Along with Electric or Magnetic holding, Mechanical latch based holding is recommended. This enables the operator take out the rolling stock out voluntarily in case any auxiliary supply failure is there. If only electric or magnetic holding is there, there is no chance to keep the breaker closed and provide traction DC supply, even if the operator wants to move the train. With mechanical latching, fail safe logic of Auto tripping can also be made, but the breaker can be mechanically closed if the operator wishes to bring the rolling stock to the platform for evacuation.	Any updated and proven design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.
395.	Volume-IV - Technical Specificatio n	Chapter 15 - Clause 15.3.9.1 Page (24/112)	The circuit breaker operating mechanism shall be Electro-magnetic closing and with electric or magnetic holding as approved by Engineer or solenoid actuating mechanism which shall be so designed as to enable continuous sequence of opening and	Request to modify the clause as: The circuit breaker operating mechanism shall be Electro-magnetic closing and with electric or magnetic and / or mechanical holding as approved by Engineer or solenoid actuating mechanism which shall be	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			closing operations through a control switch as long as power is available.	so designed as to enable continuous sequence of opening and closing operations through a control switch as long as power is available.	
				Request for clause modification to enable the operator take out the rolling stock out voluntarily in case any auxiliary supply failure is there. If only electric or magnetic holding is there, there is no chance to keep the breaker closed and provide traction DC supply, even if the operator wants to move the train. With mechanical latching, fail safe logic of Auto tripping can also be made, but the breaker can be mechanically closed if the operator wishes to bring the rolling stock to the platform for evacuation.	
				Furthermore, by prescribing electric or magnetic holding, the choice of DC HSCB is reduced to one vendor only.	



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
396.	Volume-IV - Technical Specificatio n	Chapter 15 Sub Sub- Clause 15.3.9.1 Page (24/112)	Clause 15.3.9.1 - Operating Mechanism The circuit breaker operating mechanism shall be Electro-magnetic closing and with electric or magnetic holding as approved by Engineer or solenoid actuating mechanism which shall be so designed as to enable continuous sequence of opening and closing operations through a control switch as long as power is available.	Request to modify the clause as: The circuit breaker operating mechanism shall be Electro-magnetic closing and with electric or magnetic and / or mechanical holding as approved by Engineer or solenoid actuating mechanism which shall be so designed as to enable continuous sequence of opening and closing operations through a control switch as long as power is available.	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall prevail.
397.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause 15.4.5.4 Page (39/112)	The following safety features shall be provided as a minimum: a. 110V (+10%, - 20%) DC supply from a battery/battery charger set. Auxiliary supplies will be made available for control and other purpose. In the event of the failure of the auxiliary supply, the rectifier shall be put under shut down and visual / audible alarm indication be arranged at the sub-station as well as at the remote-control centre.	Traction Rectifier cannot be shut down in case of 110V control supply fails since rectifier is directly feed from 33kV feeder breaker through traction transformer and there is no tripping device in between. 33kV breakers are mechanically latched so can't be tripped in case of 110V control supply failed. However, DC incoming breakers and DC Section feeders will be tripped in case of control 110V supply fails. Hence, request you to	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				suitably modify the requirement.	
398.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause . 15.4.5.5 Page (39/112)	The equipment shall work normally on remote operation, but facilities shall also be provided for local control of the equipment	Rectifier is passive equipment means there will be no local control of rectifier. It will be switched on/off when 33kV traction transformer feeder is on/off. Hence, we request you to delete the clause.	The Tender Conditions shall prevail.
399.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause 15.5.3 Page (46/112)	Table: 15.6 1. Type: Three phase, cast resin dry type Aluminium wound step down, indoor installation for feeding to 12 pulse silicon rectifier assembly with two parallel type six pulse bridges. 2. Configuration: Y(+7.5 o)y0d11 and Y(-7.5 o)y0d11.	As per Table 15.6; S. No. 1) 12 Pulse rectifier transformer is required. However, as per S. No. 2) refers for 24 Pulse rectifier transformer. In view of the above, Bidder understand that, 12 pulse rectifier transformers are to be considered similar to various metros like Bangalore Metro, Kochi Metro etc.	The rectifier - transformer with configuration: Y(+7.5 o)y0d11 and Y(- 7.5 o)y0d11 shall be used and this will feed the 12 pulse rectifier to achieve 24-pulse DC supply output. The Tender Conditions shall prevail.
400.	Volume-IV - Technical Specificatio n	Chapter 15 Sub- Clause.15.5.	Table: 15.6, Sr. No.: 2 Type: Three phase, cast resin dry type Aluminium wound step down, indoor installation for feeding to 12 pulse	Need clarification whether rectifier unit will be 12 Pulse or 24 Pulse	The rectifier - transformer with configuration: Y(+7.5 o)y0d11 and Y(- 7.5 o)y0d11 shall be used and this will



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		(Page (47/112)	silicon rectifier assembly with two parallel type six pulse bridges		feed the 12 pulse rectifier to achieve 24-pulse DC supply output. The Tender Conditions shall prevail.
401.	Technical	Chapter 15 Sub- Clause.15.5. 3 (Page (47/112)	Table: 15.6, Sr. No.: 2 Configuration: Y(+7.5 o)y0d11 and Y(-7.5 o)y0d11	For 24 pulse rectifier recommended vector group is D(+7.5)d0y11 & D(-7.5)d0y11. We do not recommend extended star connection in HV as it is very complicate to manufacture and will be costlier when compared to extended delta configuration. There will be no Performance difference in either of the vector group configuration. If the rectifier unit is 12 pulse, extended delta configuration is not required. In this case recommended Vector group will be Dd0y11 (Same as been supplied to various metros like Kanpur Metro, Bangalore Metro, Kolkata Metro & Kochi Metro)	The Traction and Power Supply contractor may propose appropriate vector group by keeping the Rectifier transformer configuration: Y(+7.5 o)y0d11 and Y(-7.5 o)y0d11 to feed 12 pulse rectifier to achieve 24 pulse DC supply output. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
402.	Volume-IV - Technical Specificatio n	Chapter 15 Sub Clause. 15.5.3 Page (47/112)	Table 15.6, Sr. No. 2 Configuration: Y(+7.5o)y0d11 and Y(-7.5o)y0d11	For proven design of rectifier transformer and rectifier combined unit, we recommend to have vector group configuration as Dd0Y11 in the rectifier transformer to have adequate phase shift of +/- 7.5 deg. If the rectifier unit is 12 pulse, extended delta configuration is not required. In this case recommended vector group will be Dd0y11 (same as been supplied to various metros like Kanpur metro, Bangalore metro, Kolkata metro & Kochi metro)	The Traction and Power Supply Contractor may propose suitable winding configuration fo the Engineer's approval along with supporting documents provided that the phase shift shall be +/- 7.5 degree so that rectifier can give output DC voltage of 24 pulse. The Tender Conditions shall prevail.
403.	Volume-IV - Technical Specificatio n	Chapter 15 Sub- Clause.15.5. 3 (Page (48/112)	Table: 15.6, Sr. No.: 11 Rated short circuit withstand rating for HV winding: 12 kA for 1 sec	We understand this is system Fault current for HV side and is up to the transformer terminals only. The SC withstand capability of transformer windings will be as per IEC60076-5.	The contractor shall submit GTP as per technical requirement given in Table No 14.4 Chapter 14 of Vol-IV Technical Specification for approval of Engineer. The Tender Conditions shall prevail.
404.	Volume-IV -	Chapter 15,	Table: 15.6, Sr. No.: 21		The Tender Conditions shall



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Technical Specificatio n	Sub- Clause.15.5. 3 (Page (48/112)	Coupling Factor: The bidders may quote for the coupling factor K>0.9 or K<0.2 as per IEC 62695. In case interphase transformer is required for the design proposed by the bidder than it has to be provided within BOQ Item A.3 of Bill No. 5.1 & 5.2, without any extra cost	Coupling Factor of the transformer will be k<0.2 only.	prevail.
405.	Volume-IV - Technical Specificatio n	Chapter 15 Sub- Clause.15.5. 3 (Page (49/112)	Table: 15.6, Sr. No.: 7 %age Impedance: HV/LV: - 12% LV/LV: - 6% HV/LV: - 12% NOTE: These are indicative values and approval of design of the transformer is a matter of detailed design. Alternative values to the satisfaction of the engineer shall be acceptable during GTP approval. For k < 0.2 impedance voltage can be half of the above mentioned	Noted. Final Values will be as per our Guaranteed Technical Particulars.	The Tender Conditions shall prevail.
406.	Volume-IV - Technical Specificatio	Chapter 15 Sub-Clause 15.5.4.2	The noise level shall not exceed 65 db at a distance of 1.5m in accordance with BS 6065	The Noise level of transformer will be in accordance with NEMA Tr-1.	Any updated design can be proposed by the Contractor as per applicable standards



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	n	Page .(50/112)			of latest version for review and approval of the Engineer. The Tender Conditions shall prevail.
407.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause .15.5.4.3.5 Page (50/112)	The transformer shall be mounted on four bi directional type flanged wheels for forward and cross wise movement on rails.	Transformer will be mounted on 4 or 6 Nos. bi-directional rollers	The Tender Conditions shall prevail.
408.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause .15.5.4.4.1 Page (50/112)	The transformer shall be fitted with externally operated off circuit links for varying its effective transformation ratio covering the specified voltage range as per ratings specified above table	Manually Operated off Circuit Tap links accessible after opening the transformer enclosure bolted cover shall be provided.	The Tender Conditions shall prevail.
409.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause .15.5.4.6.1 Page (51/112) Chapter 15	The door shall be provided with a mechanical system interlock, to ensure that it is possible to open the door only when the protection circuit breakers on the HV side as well as LV side of the transformer are in 'Open' position.	Mechanical Interlock will not be in scope of Hitachi Energy. However, provision for mounting the mechanical interlock will be provided on enclosure. Details of mechanical interlock will be provided by purchaser during detail engineering.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		Sub-Clause .15.5.4.6.2 Page (51/112)	These doors shall be closed and locked to prevent access to the transformer while either the MV or the LV side is live		
		Chapter 15 Sub-Clause 15.5.5.2.2 Page (52/112)	The transformer cubicle door shall be provided with a mechanical system interlock, to ensure that it is possible to open the door only when the protection circuit breakers on the HV side as well as LV side of the		
410.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause .15.5.4.7.1 (page (51/112)	Two Sensors shall be located on the upper part of the secondary windings.	The sensors shall be placed on LV coils at hotspot and on top LV coils only	The Tender Conditions shall prevail.
		Chapter 15 Sub-Clause .15.5.5.2.1 (Page (52/112)	This shall consist of two sensors placed on each low-voltage winding.		
411.	Volume-IV -	Chapter 15	All terminals should be provided with	All Nut & Bolts, Hardware shall be of	Any alternative design shall



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Technical Specificatio n	Sub-Clause .15.5.4.9.1 Page (51/112)	suitable Zinc passivated high tensile steel hardware's (grade 8.8) facilitate cables termination.	SS304 (Stainless Steel).	be proposed by contractor for review and approval of the Engineer. The Tender Conditions shall prevail.
412.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause .15.5.4.10 Page (51/112)	Labels: Description labels of non-corrosive material or vitreous enamelled iron plate (preferably SS) shall be of approved design and material that will ensure permanence of lettering. The finish shall be such that provides dazzle free look from the reflected light. The colour used shall be permanent and non-fading. All the screws used for fixing the labels shall be of brass or with steel screws or Aluminium POP rive, which have received an approved rust preventive treatment.	All labels will stickers only.	The Tender Conditions shall prevail.
413.	Volume-IV - Technical Specificatio	Chapter 15 Sub-Clause .15.5.6.2 Page	If prototype test confirming to this specification has already been conducted and certificate issued after conducting type test by recognized	We have attached similar rating type & Special test report for your reference & acceptance. In case any type or special test are required,	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	n	(52/112)	laboratories then fresh type test may be waived off, if it had passed the type tests earlier and no change in the design or material used have been made. Certified copies of the tests report shall be furnished by the contractor for consideration.	same will be carried out at extra price.	
414.	Volume-IV - Technical Specificatio n	Chapter 15 Sub- Clause.15.5. 8 Page (57/112)	Temperature rise* Lightning impulse withstand voltage test* Short circuit test	3 71 1	The Tender Conditions shall prevail.
415.	Volume-IV - Technical Specificatio n	Chapter 15 Sub- Sub- Clause 15.5.8 Page (57/112)	Measurement of commuting reactance and determination of inductive voltage drop	Commutating reactance as per IEC 61378 part-1 clause 7.2 can be done, according to which commutating reactance is calculated based upon measured impedance (%Z) of the transformer. However, to determine inductive voltage drop, all the values required are from rectifier side except for commutating reactance which we will	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				be provide by us.	
416.	Volume-IV - Technical Specificatio n	Chapter 15 - Sub-Clause 15.6.3.1 Page (58/112)	The VLD-O device shall have the following main characteristics indicated in table 1 - Table 15.9: VLD-O Device.	Request to modify point 3 and allow - Rated short circuit withstand current to 50 kA for 250 ms (instead of 100 kA for 0.1 s).	The Tender Conditions shall prevail.
417.	Volume-IV - Technical Specificatio n	Chapter 15 Sub- Clause 15.6.3.1 Page (58/112)	Clause 15.6.3.1 - VLD-O Device The VLD-O device shall have the following main characteristics indicated in table 1 - Table 15.9: VLD-O Device.	Request to modify point 3 - Rated short circuit withstand current to 50 kA for 250 ms (instead of 100 kA for 0.1 s).	The Tender Conditions shall prevail.
418.	Volume-IV - Technical Specificatio n	Chapter 15 - Sub-Clause . 15.6.3.1 Page (58/112)	The VLD-O device shall have the following main characteristics indicated in table 1 - Table 15.9: VLD-O Device.	Request to modify point 3 - Rated short circuit withstand current to 50 kA for 250 ms (instead of 100 kA for 0.1 s). Request for clause modification.	The Tender Conditions shall prevail.
419.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause 15.5.4.6.1 Page	The door shall be provided with a mechanical system interlock, to ensure that it is possible to open the door only when the protection	We understand for the provision of door limit switch with the door and it will be interlocked with the HV circuit breaker and DC	Any updated design shall be proposed by the Contractor to the Engineer for approval. The Tender Conditions shall



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		(59/112) Sub- Clause 15.13.4.6.1 Page (105/112)	circuit breakers on the HV side as well as LV side of the transformer are in 'Open' position	incoming breaker. We request you to confirm.	prevail.
420.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause 15.6.3.2 Page (59/112)	To achieve this, the SCD shall be provided with necessary numerical relays	OVPD shall be provided with necessary PLC/ controller for protection system and for communication to RTU. We request you to modify the clause accordingly	The Tender Conditions shall prevail.
421.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause. 15.7.4.1 Page (64/112)	The proposed Negative Return Panel shall essentially consist of a single pole disconnecting switch for each rectifier.	Rated current of each negative disconnector is not specified. We understand that it will be 6000A for each rectifier disconnector, hence, 2 X 6000A disconnector for two rectifiers set. Please confirm.	The Tender Conditions shall prevail.
422.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause .15.12.2.6 Page (92/112)	15.12.2.6 Inverter shall be indoor, natural convection air-cooled, freestanding, and metal enclosed. Air filters, if required, shall be easily replaceable. Each Inverter shall be complete with internal buses,	Request to change requirement from "natural convection air-cooled" to "air forced cooling" or "air cooled" or refer to Table 15.22: Inverter Rating item 16 Cooling.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			connections and flanges for external bases, negative disconnect switch, protective devices, control wiring, terminal blocks, and all other necessary accessories. The temperature of the inverter shall be controlled by a sensor. An alarm shall be activated in the OCC in case of a too high temperature increase. Status of all monitoring and operation devices can be viewed without a shut.		
423.	Volume-IV - Technical Specificatio n	Chapter 15 - Sub-Clause 15.12.2.6 Page (92/112)	15.12.2.6 Inverter shall be indoor, natural convection air-cooled, freestanding, and metal enclosed. Air filters, if required, shall be easily replaceable. Each Inverter shall be complete with internal buses, connections and flanges for external bases, negative disconnect switch, protective devices, control wiring, terminal blocks, and all other necessary accessories. The temperature of the inverter shall be controlled by a sensor. An alarm shall be activated in the OCC	Request to change requirement from "natural convection air-cooled" to "air forced cooling" or "air cooled" or refer to Table 15.22: Inverter Rating item 16 Cooling. Request for clause modification.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			in case of a too high temperature increase. Status of all monitoring and operation devices can be viewed without a shut.		
424.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause . 15.12.2.6 Page (92/112)	Clause 15.12.2 Specifications 15.12.2.6: Inverter shall be indoor, natural convection air-cooled, freestanding, and metal enclosed. Air filters, if required, shall be easily replaceable. Each Inverter shall be complete with internal buses, connections and flanges for external bases, negative disconnect switch, protective devices, control wiring, terminal blocks, and all other necessary accessories. The temperature of the inverter shall be controlled by a sensor. An alarm shall be activated in the OCC in case of a too high temperature increase. Status of all monitoring and operation devices can be viewed without a shut.	Request to change requirement from "natural convection air-cooled" to "air forced cooling" or "air cooled" or refer to Table 15.22: Inverter Rating item 16 Cooling.	The Tender Conditions shall prevail.
425.	Volume-IV -	Chapter 15 -	15.12.2.8 Inverter shall be designed for	Regenerative inverters recuperate	The overload duty cycle for



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Technical Specificatio n	Sub-Clause 15.12.2.8 Page (92/112)	a withstand overload capacity in accordance with IEC 60146 Class 6 (150% for two (2) hours, 300% for at least one (1) minute) or equivalent.	only if there is a braking vehicle on the line. Braking event takes up to 30 seconds (depends on vehicle weight, regenerative braking power etc), afterward inverter does not work till next braking train appears in the section. Thus duty class VI does not describe an inverter load and will lead to power oversizing with increased cost for the equipment. Please specify a specific load cycle according to vehicle regenerative power, braking time and headway. For example, 30sec load 1MW, 90sec no load (headway 120sec), or as already proposed in 15.12.3.1 power cycle 10 sec on (1MW), 50 sec off. Please refer to IEEE Approved Draft Guide on Energy Feedback Systems for DC Traction Power Supply	inverter and inverter transformer shall be class 6(as per IEC 60146) as same as rectifier transformer. The contractor shall interface with Rolling stock contractor in respect of various parameters required for regeneration as per Table No 3.6 (Item No 12) Vol-IV Technical Specifications. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				System IEEE P2657/D2.3, May 2021. Request for clause modification.	
426.	Volume-IV - Technical Specificatio n	Chapter 15 - Sub. Clause 15.12.2.8 Page (93/112)	15.12.2.8 Inverter shall be designed for a withstand overload capacity in accordance with IEC 60146 Class 6 (150% for two (2) hours, 300% for at least one (1) minute) or equivalent.	Regenerative inverters recuperate only if there is a braking vehicle on the line. Braking event takes up to 30 seconds (depends on vehicle weight, regenerative braking power etc), afterward inverter does not work till next braking train appears in the section. Thus duty class VI does not describe an inverter load and will lead to power oversizing with increased cost for the equipment. Please specify a specific load cycle according to vehicle regenerative power, braking time and headway. For example, 30sec load 1MW, 90sec no load (headway 120sec), or as already proposed in 15.12.3.1 power cycle 10 sec on (1MW), 50 sec off.	The overload duty cycle for inverter and inverter transformer shall be class 6(as per IEC 60146) as same as rectifier and rectifier transformer. The contractor shall interface with Rolling stock contractor in respect of various parameters required for regeneration as per Table No 3.6 (Item No 12) Vol-IV Technical Specifications. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				Please refer to IEEE Approved Draft Guide on Energy Feedback Systems for DC Traction Power Supply System IEEE P2657/D2.3, May 2021.	
427.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause 15.12.3 Page (93/112)	15.12.3.1 "Overload Ratings: The inverter unit shall be capable of operating continuously at rated power. The indicative maximum power cycling could be 10 sec on 50 sec off." and Table 15.22: Inverter Rating item 10 Overload capability In accordance with IEC 60146 class VI or equivalent	Same clarification as for clause 15.12.2 - Specifications. Please specify a specific load cycle according to vehicle regenerative power, braking time and headway. For example, 30sec load 1MW, 90sec no load (headway 120sec), or as already proposed in 15.12.3.1 power cycle 10 sec on (1MW), 50 sec off. Please refer to IEEE Approved Draft Guide on Energy Feedback Systems for DC Traction Power Supply System IEEE P2657/D2.3, May 2021. Request for clause modification.	The overload duty cycle for inverter and inverter transformer shall be class 6(as per IEC 60146) as same as rectifier transformer. The contractor shall interface with Rolling stock contractor in respect of various parameters required for regeneration as per Table No 3.6 (Item No 12) Vol-IV Technical Specifications. The Tender Conditions shall prevail.
428.	Volume-IV -	Chapter 15	15.12.3.1 "Overload Ratings: The	Same clarification as for clause	The overload duty cycle for



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Technical Specificatio n	Sub-Clause 15.12.3 Page (93/112)	inverter unit shall be capable of operating continuously at rated power. The indicative maximum power cycling could be 10 sec on 50 sec off." and Table 15.22: Inverter Rating item 10 Overload capability In accordance with IEC 60146 class VI or equivalent	15.12.2 - Specifications. Please specify a specific load cycle according to vehicle regenerative power, braking time and headway. For example, 30sec load 1MW, 90sec no load (headway 120sec), or as already proposed in 15.12.3.1 power cycle 10 sec on (1MW), 50 sec off. Please refer to IEEE Approved Draft Guide on Energy Feedback Systems for DC Traction Power Supply System IEEE P2657/D2.3, May 2021. Request for clarification.	inverter and inverter transformer shall be class 6(as per IEC 60146) as same as rectifier and rectifier transformer. The contractor shall interface with Rolling stock contractor in respect of various parameters required for regeneration as per Table No 3.6 (Item No 12) Vol-IV Technical Specifications. The Tender Conditions shall prevail.
429.	Volume-IV - Technical Specificatio n	Chapter 15 Sub- Clause 15.12.3 Page (93/112)	Table 15.22: Inverter Rating Item 12 Protection level IP 31 and 15.12.4.1 " Mesh screen of air inlet and outlet shall be designed to maintain the degree of protection IP 31".	IGBT technology due to high power density requires air forced cooling. We propose protection level IP21. Kindly accept and clarify.	The Tender Conditions shall prevail.
430.	Volume-IV - Technical	Chapter 15 - Sub Clause	Table 15.22: Inverter Rating Item 12 Protection level IP 31	IGBT technology due to high power density requires air forced cooling.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specificatio n	.15.12.3 Page (93/112) and Sub Sub- Clause 15.12.4 Page (95/112)	and 15.12.4.1 " Mesh screen of air inlet and outlet shall be designed to maintain the degree of protection IP 31".	We propose protection level IP21. Request for clause modification.	
431.	Volume-IV - Technical Specificatio n	Chapter 15 - Sub Clause . 15.12.3.2 Page (93/112)	Table 15.22: Inverter Rating, item 9, Efficiency > 97.5%.	Please specify whether it applies to inverter only or to assembly of inverter and its autotransformer respectively inverter transformer. IGBT inverter without autotransformer and / or inverter transformer has typically an efficiency level of 97.5%. Request for clause modification.	Efficiency level shall be more than 97.5% for transformer inverter set. Please refer Clause No. 15.12.3.2 of Chapter 15 Vol-IV Technical Specifications. The Tender Conditions shall prevail.
432.	Volume-IV - Technical Specificatio	Chapter 15 - Sub Clause . 15.12.3	Table 15.22: Inverter Rating. item 8, Maximum output current (AC) 1238 A	This value is an outcome of load cycle, consider to delete. Please also refer to clause 15.12.3 - Specification	The Contractor shall interface with Rolling Stock contractor for Duty cycle.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	n	Page (93/112)		and clause 15.12.3 - Ratings. Request for clause modification.	The Tender Conditions shall prevail.
433.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause 15.12.3 Page (93/112)	Table 15.22: Inverter Rating. Item 11, Rated insulated voltage: 2300 V	Fulfilment of rated insulated voltage 2300 V according to IEC 62590:2019 Table 8 forces power frequency withstand voltage on level 5.5kV AC 60sec. This is typical requirement for 1500 VDC railway systems. For 750 VDC system, rated insulated voltage is 1200 V and power frequency withstand voltage 3,6kV AC 60 sec. Request for clause modification.	Corrigendum is being issued separately.
434.	Volume-IV - Technical Specificatio n	Chapter 15 - Sub Clause . 15.12.3 Page (93/112)	Table 15.22: Inverter Rating: item 23 "including autotransformer cubicle" item 26 " with one dedicated transformer for inverter"	Please unify wording: transformer, autotransformer. It is not clearly stated how the inverter shall be connected to the AC MV grid, i.e. through an autotransformer connected to the secondary winding of the rectifier transformer - or - with a specific inverter transformer connected to a	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				dedicated MV panel. Request for clause modification.	
435.	Volume-IV - Technical Specificatio n	Chapter 15 - Sub- Clause. 15.12.3.1 Page (93/112)	Table 15.22: Inverter Rating: item 9, Efficiency > 97.5%. And 15.12.3.2	Please specify whether it applies to inverter only or to assembly of inverter and its autotransformer respectively inverter transformer. IGBT inverter without autotransformer and / or inverter transformer has typically an efficiency level of 97.5%	Efficiency level shall be more than 97.5% for transformer inverter set. Please refer Clause No. 15.12.3.2 of Chapter 15 Vol-IV Technical Specifications. The Tender Conditions shall prevail.
436.	Volume-IV - Technical Specificatio n	Chapter 15 - Sub- Clause. 15.12.3.1 Page (94/112)	Table 15.22: Inverter Rating: item 8, Maximum output current (AC) - 1238 A	This value is an outcome of load cycle, consider to delete. Please also refer to clause 15.12.3 - Specification and clause 15.12.3 - Ratings.	The Power Supply & Traction Contractor shall interface with Rolling Stock contractor for Duty cycle. The Tender Conditions shall prevail.
437.	Volume-IV - Technical Specificatio n	Chapter 15 - Sub-Clause 15.12.3.1 Page (95/112)	Table 15.22: Inverter Rating: item 23 "including autotransformer cubicle" item 25 " with one dedicated transformer for inverter"	Please unify wording: transformer, autotransformer. It is not clearly stated how the inverter shall be connected to the AC MV grid, i.e. through an	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				autotransformer connected to the secondary winding of the rectifier transformer - or - with a specific inverter transformer connected to a dedicated MV panel. Kindly clarify.	
438.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause . 15.12.3.1 Page (95/112)	Sub-Clause 15.12.3 Ratings Table 15.22: Inverter Rating: item 23 "including autotransformer cubicle" item 25 " with one dedicated transformer for inverter"	Please unify wording: transformer, autotransformer. It is not clearly stated how the inverter shall be connected to the AC MV grid, i.e. through an autotransformer connected to the secondary winding of the rectifier transformer - or - with a specific inverter transformer connected to a dedicated MV panel.	Corrigendum is being issued separately.
439.	Volume-IV - Technical Specificatio n	Chapter 15 Sub-Clause. 15.12.3.1 Page (95/112) Sub- Clause 15.12.4	Sub-Clause 15.12.3 Ratings, S No. 24: Technology - IGBT and Sub-Clause 15.12.4 CONSTRUCTION FEATURES	IGBT technology due to high power density requires air forced cooling. We propose protection level IP21. Kindly Consider.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		Page (95/112)			
440.	Volume-IV - Technical Specificatio n	Chapter 15 - Sub-Clause 15.13.4.6.2 Page (105/112)	A metal sheet shall be installed at 10 to 15 cm from the top grating to provide protection against any falling water	As this is indoor type transformer no falling of water is envisaged. Also, this type of arrangement to have additional sheet over the enclosure of transformer cubicle is not recommended, in order to have better air circulation. Hence, we request you to amend the clause accordingly.	The Tender Conditions shall prevail.
441.	Volume-IV - Technical Specificatio n	Chapter-16 Sub-Clause 16.1.1.3 Page (3/44) Sub-Clause. 16.2.4.2.2 Page (9/44)	The third rails shall be manufactured in standard lengths such as 15 m length, which shall be joined together by special splice joints Rails shall be preferably supplied in lengths of 15m with pre-drilled holes for splice joints	We request you to accept 11m to 15 m length of conductor rail for the ease of transportation.	The Tender Conditions shall prevail.
442.	Volume-IV - Technical Specificatio	Chapter-16 Sub-clause. 16.2.2.10,	At defined locations it is required to interrupt the conductor rail. This applies to turnout locations but also at locations	We understand the gap solution to be used and the clauses referring to insulated joint (IJ) to be deleted.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	n	Page (8/44) Sub clause 16.2.4.10 Page (19/44) & Sub clause .16.3.5 Page (27/44)	where the conductor rail changes to the other side of the track, at level crossings, in the depot area and last but not least at locations where two different feeding sections must be separated.	Please confirm our understanding.	
443.	Volume-IV - Technical Specificatio n	Chapter-16 Sub-Clause. 16.2.4 Page (9/44) Sub-Clause. 16.2.4.2.3 Page (9/44)	The process used for the composition of conductor rail shall preferably have no gaps between the head of the aluminium section and the stainless-steel wearing strip. There shall be no evidence of 'hollow ring. The interface resistance between steel and aluminium shall not exceed $10~\mu\Omega$.	In similar tender like BMRCL Tender No EP4-CC, the interface resistance between steel and aluminium shall not exceed 30 $\mu\Omega$ is given. We request you to amend the clause as mentioned below: "The process used for the composition of conductor rail shall preferably have no gaps between the head of the aluminium section and the stainless-steel wearing strip. There shall be no evidence of 'hollow ring. The interface resistance	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				between steel and aluminium shall not exceed 30 $\mu\Omega."$	
444.	Volume-IV - Technical Specificatio n	Chapter-16 Sub-Clause 16.2.4.2.3 Page (9 / 44)	The process used for the composition of conductor rail shall preferably have no gaps between the head of the aluminium section and the stainless-steel wearing strip. There shall be no evidence of 'hollow ring. The interface resistance between steel and aluminium shall not exceed 10 $\mu\Omega$.	Following addition is proposed: The interface resistance between steel and aluminium shall not exceed 30 $\mu\Omega.$	Corrigendum is being issued separately.
445.	Volume-IV - Technical Specificatio n	Chapter-16 Sub Clause. 16.2.4.2.3 Page (9 /44) Sub-Clause. 16.3.1.4.5.1	The interface resistance between steel and aluminium shall not exceed 10 $\mu\Omega$. The contact resistance at the aluminium and stainless-steel joint shall not exceed 10 $\mu\Omega$ over the series of measuring points, at a minimum 5 per 15-meter length.	An interface resistance of 10 $\mu\Omega$ can be achieved only with coextruded conductor rails, while welded conductor rails have normally an interface resistance below 30 $\mu\Omega$. This value is a typical requirement accepted in many Third Rail Installations that has no significant impact on current collection. Please increase the value up to 30 $\mu\Omega$ to include the manufacturing by welding	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				process which is	
446.	Volume-IV - Technical Specificatio n	Chapter-16 Sub- Clause. 16.2.4.5.6 Page (13/44)	a. Typically, 5.0 m for high-speed ramp (over 90 kmph) used on the main line (slope 1/50)	Design speed is below 90km/h, therefore "over" should be amended with "up to".	Corrigendum is being issued separately.
447.	Volume-IV - Technical Specificatio n	Chapter-16 Sub-Clause . 16.2.4.5.8 Page (13/44)	The ramp throat shall be 130 mm above surface of conductor rail at the end of the ramp.	Please clarify this requirement, what is ramp throat and why the value shall be exactly 130 mm.	Corrigendum is being issued separately.
448.	Volume-IV - Technical Specificatio n	Chapter-16 Sub-Clause. 16.2.4.6.4 Page (14/44) Sub-Clause . 16.2.4.6.5 Page (14/44)	In the event of overload [] the anchor shall be designed to move and ease the load in the rail. Anchors shall be designed to locate against a support bracket so that if overload occurs, the bracket may deflect and indicate the fault	These two requirements are clearly in contradiction: the anchor can be designed either to move or to withstand the overload. The latter is the standard solution as per industry standard, that we normally follow. Furthermore, the use of Huck bolts (ref. clause 16.2.4.6.2) makes impossible to control the tightening torque to allow the	Corrigendum is being issued separately.
449.	Volume-IV - Technical	Chapter-16 Sub-Clause .	Cable terminals shall be designed to carry safely the full rail current without	According to table 15.18, 4 or 5 copper cables 400mm2 shall be	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specificatio n	16.2.4.7.5 Page (15/44)	overheating. They shall allow sufficient room for easy connection of the cables. They shall be suitable for the termination of up to three 300 mm2 copper cables.	connected to Third Rail. Please clarify the correct requirement.	
450.	Volume-IV - Technical Specificatio n	Chapter-16 Sub-Clause. 16.2.4.8.14 Page (17/44)	Clamps (jaws): the clamps are composed of two half clamps made of cast copper aluminium alternatively cast stainless steel	There is no technical advantage in using copper aluminium or stainless steel compared to hot dip galvanized steel which provides the best combination of mechanical resistance and corrosion resistance. On the contrary, copper alloys are more subject to theft (as mentioned in clause 16.3.8.1.1-c). It should be noted that the clamps are not in contact with other metals since they are connected with insulator on one side and with plastic sliding bearings on the other side. Please include cast steel as a possible alternative, as already allowed by clause 16.2.4.8.10 "cast steel fastener"	The Tender Conditions shall prevail.
451.	Volume-IV -	Chapter-16	The insulator shall be manufactured	We kindly ask to change the	Corrigendum is being issued



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Technical Specificatio n	Sub-Clause. 16.2.4.8.19 Page (17/44)	with a high creepage distance (not less than 140 mm)	minimum creepage distance to 130mm, which is already a "high value" (meeting and also exceeding the requirements of EN 50124-1 standard) that allows to respect all the functional requirements.	separately.
452.	Volume-IV - Technical Specificatio n	Chapter-16 Sub-Clause . 16.2.4.8.20 Page (17/44)	The insulators shall withstand 15kV industrial frequency voltage in dry conditions for one minute	As per clause 16.3.8.3.5, the value of 15kV is the impulse withstand voltage while the dry power frequency withstand voltage shall be 10kV as per clause 16.3.8.3.3. Please confirm 10kV is the correct value in clause 16.2.4.8.20	Corrigendum is being issued separately.
453.	Volume-IV - Technical Specificatio n	Chapter-16 Sub- Clause 16.2.4.8.20 Page (17/44)	The insulators shall withstand 15 kV industrial frequency voltage in dry conditions for one minute. The voltage being applied between mounting studs and the rail position shall not cause any flashover	It will be 10kV for 1 minute for dry and 15kV will be dry impulse voltage, as per clause no 16.2.4.9.5. Please confirm.	Corrigendum is being issued separately.
454.	Volume-IV - Technical Specificatio	Chapter-16 Sub-Clause. 16.3.1.4.8.1	A short circuit test shall be performed by passing an (alternating) current of 120 kA	According to table 16.3, the rated short circuit current is 100kA. Please confirm 100kA is the correct value for	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	n	Page (25/44)		clause 16.3.1.4.8.1	
455.	Volume-IV - Technical Specificatio n	Chapter-16 Sub-Clause. 16.3.1.4.6. 2 Page (25/44)	A current heating test shall be performed and a geometric test for the feeding points with the cable terminal assemblies	Geometric test is no longer required for feeding points. Kindly amend the clause as "A current heating test for the feeding points with the cable terminal assemblies shall be performed."	The Tender Conditions shall prevail.
456.	Volume-IV - Technical Specificatio n	Chapter-16 Sub-Clause. 16.3.1.5.3.1 Page (26/44)	One rail per 100 rails shall be subject to an ultrasonic examination to ensure the absence of any voids in the aluminium to steel interface	Ultrasonic examination is able to identify voids only if the coupling process between aluminium and stainless steel is by coextrusion only. In case of welding, the ultrasonic will always detect the presence of an interface between metals, which not necessarily represent voids. For this reason, in case of welded coupling, the ultrasonic examination cannot be applied and a contact resistance test is proposed as an alternative. Acceptance criterion is a contact resistance below 30 µW (typical limit value for welded conductor rails).	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
457.	Volume-IV - Technical Specificatio n	Chapter-17 Sub-Clause. 17.4.2.2 Page (4/32)	Stray current collector cables (commonly known as structural earth cable, 2 x 185 mm2 aluminium) shall be provided along the viaduct and all the metallic parts of equipment, cable sheath, viaduct reinforcement, signal posts, ASS/TSS earth mats, viaduct pillar etc. shall be connected to structural earth (SE) cable with 120 mm2 aluminium conductor	We understand that this will be bare conductor and not a cable. Kindly confirm.	The SEC cable of size 185 Sq mm Aluminium and interconnecting cable of size 120 Sq mm both are cable and not bare conductor. The Tender Conditions shall prevail.
458.	Volume-IV - Technical Specificatio n	Chapter-17 Sub-Clause 17.11.10.1 Page (22/32)	On completion of the entire work by all Contractors and prior to commencement of services, baseline stray current surveys shall be performed, as required, to produce a documented reference for future investigations. Initial survey shall be conducted prior to the start of revenue service. The survey shall include, but not be limited to, the following activities: a. Soil and ground water corrosive characteristics shall be determined and documented. Structure to soil voltage measurements shall be made to	We understand that, on completion of entire work, baseline survey for stray current reference value will be created during service & operational trials. The SCMS system will record all the data. After analysing these data, it will form the reference value. Please confirm our understanding.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			establish locations, sources and polarities of existing stray currents. b. Recording charts shall be obtained to determine the effects and magnitude of stray currents, if present, on existing utility installations.		
459.	Volume-IV - Technical Specificatio n	Chapter-17 Sub Clause 17.11.10 Page (23/32)	(a) Soil and ground water corrosive characteristics shall be determined and documented. Structure to soil voltage measurements shall be made to establish locations, sources and polarities of existing stray currents.	We understand that soil test reports carried out pier locations and at the station locations by respective civil contractor shall be provided to Traction and power supply contractor for review and reference. It is understood that, the Bidder shall measure the structure to soil / earth characteristics to meet 200mV criteria as per EN-50122-2. Request to amend the clause accordingly.	The contractor has to get the structure to soil / earth characteristics himself. The Engineer will support. The Tender Conditions shall prevail.
460.	Volume-IV - Technical Specificatio n	Chapter-17 Sub Clause 17.11.10 Page (23/32)	Baseline stray current survey	Bidder requests to include 'baseline stray current survey and measurements' in BOQ/Price schedule. Please Confirm.	Refer explanatory notes to BoQ of Bill no. IN-8.1 item no. A.10. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
461.	Volume-IV - Technical Specificatio n	Chapter 18, Sub-Clause 18.5,x Page (9/213)	Interface with Signaling contractor for the requirement of Visual Control Panel (VCP) or Large Video wall for Traction SCADA at OCC and Uninterrupted Power Supply (UPS) load for Traction SCADA equipment at OCC.	As per BOQ, the scope of supply of VDP and controllers lies with Traction Power supply Contractor. Kindly confirm.	The Tender Conditions shall prevail.
462.	Volume-IV - Technical Specificatio n	Chapter 18 Sub-Clause. 18.7.1.5 Page (12/213)	Sir. Name of Sistion Station Type Category No. of MYU.	Kindly clarify why 3 Nos RTU is required at the Stations-Bada Ganpati and Airport.	Corrigendum is being issued separately
463.	Volume-IV - Technical Specificatio n	Chapter-18 - Sub-Clause 18.7.1.5 Page (12/213)	Nos. of RTU a) BADA GANPATI (UG) - ASS Cum TSS - 3 Nos. b) AIRPORT - (UG) - ASS Cum TSS - 3 Nos.	Please clarify why 3 nos. of RTU is mentioned for the referred Underground station.	Corrigendum is being issued separately.
464.	Volume-IV - Technical	Chapter-18 Sub- Clause.	Nos. of RTU a) RAJWADA PALACE (UG) - ASS	As per price schedule, Bill No. 8.1, Sl. No. C.3 & C.4, RTU for UG ASS	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specificatio n	18.7.1.5 Page (12/213)	Cum TSS - 2 Nos. b) CHOTA GANPATI (UG) - ASS - 2 Nos. c) BADA GANPATI (UG) - ASS Cum TSS - 3 Nos. d) RAMCHNADRANAGAR (UG) - ASS cum TSS - 2 Nos. e) BSF/KALANINA (UG) - ASS cum TSS - 2 Nos. f) AIRPORT - (UG) - ASS Cum TSS - 3 Nos. Total UG Station RTU - 14 Nos.	& ASS cum TSS is 7 & 5 respectively. Hence, total UG station RTU is 12 Nos. However, as per referred Table, Total UG station RTU is 14 Nos. Please check and clarify.	
465.	Volume-IV - Technical Specificatio n	Chapter 18, Sub-Clause . 18.8.2.6 Page (15/213)	Perform control priority checks & provide control conflicts data.	Performing control priority checks is not a function of RTU. Kindly clarify the requirement.	The SCADA System should have the capability to Perform control priority checks & provide control conflicts data. The Tender Conditions shall prevail.
466.	Volume-IV - Technical Specificatio n	Chapter 18 Sub-Clause . 18.8.5.15 Page (19/213)	Web Server, Maintenance Planning Server and Energy Management Server shall be provided behind the Demilitarized Zone (DMZ) network.	Kindly elaborate the requirement and scope of Maintenance planning system since the same has not been given in BoQ or shown in SCADA Architecture.	Corrigendum is being issued separately
467.	Volume-IV -	Chapter 18,	The SCADA system shall be	Generally, SCADA Servers,	



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Technical Specificatio n	Sub-Clause. 18.9.1.1 Page (21/ 213)	constructed with modern techniques in accordance with internationally recognized standards and designed for safe and efficient operation. All materials and equipment to be supplied shall be of a proven design and the major core components of the SCADA System shall have a Service Life of at least fifteen years	workstations, printers etc. have a service life less than 15 years. Kindly modify the requirement considering the same.	The Tender Conditions shall prevail.
468.	Volume-IV - Technical Specificatio n	Chapter 18 Sub-Clause. 18.10.3.11 Page (26/213)	The SCADA system shall produce regular automatic reports of the overall power system reliability indices with faults categorized by system (e.g., feeders, HV Power etc.) and by location (e.g., TSS, ASS etc.).	As per our understanding, data related to fault shall be available in the database and as per the requirement data report shall be fetched from the database. Please clarify.	The Tender Conditions shall prevail.
469.	Volume-IV - Technical Specificatio n	Chapter 18 Sub-Clause. 18.10.4.6 Page (28/213)	Alarm Classification for Display a. This classification shall be programmed in the OCC and the local equipment but can be easily modified and reloaded in the OCC as well as in local equipment.	Alarm classification is done at Local SCADA or control Centre SCADA HMI level. Kindly clarify the requirement.	The Tender Conditions shall prevail.
470.	Volume-IV - Technical	Chapter-18:	18.10.7.5 The energy (i.e., kWh, kVArh, pf) shall be measured for each	a) As per referred clause, The energy (i.e. kWh, kVArh, pf) shall be	Any updated design shall be proposed by the Contractor



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specification	Sub-Clause. 18.10.7.5 Page (35/213) Tender drawing - TYPICAL KEY PROTECTIO N SLD OF ELEVATED ASS TYPE A - 1202-BIG-TRP- 00-DWG-ASSSLD1- 00302	primary voltage of each transformer, whether on-load or as hot standby) c. Energy meter (electronic energy meter, accuracy class 0.2s, to enable measurement of kWh and instantaneous maximum demand kVA. Only one energy meter is required to be provided, which shall be able to	measured at each 33kV CB feeding power to auxiliary transformer in ASS and rectifier transformer in TSS. However, as per referred SLD, Energy meter or MFM is not shown for 33kV Auxiliary transformer and rectifier transformer bay. Please check and confirm. b) As per referred drawing, Voltage transformer is not required for auxiliary transformer / rectifier transformer feeder. Hence, voltmeter can not be provided in the transformer bay. c) As per Sub-Clause 14.2.5.1, one number of Energy meter with summation CT shall be provided for two number of transformer bays. However, 33kV switchboard is separate for ASS-1 & ASS-2, Summation CT can not be provided. Please check and clarify. d) As per Sub-Clause 14.2.6.3, table	to the Engineer for approval. The Tender Conditions shall prevail.
			indicate/record/store the values of energy (kWh) and max demand (kVA),	no. 14.2, SI No. D.12, Metering core CT accuracy class is 0.5 only. Hence,	



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			delivered in total by transformers, through suitable summation CT and connections)	energy meter with 0.2s accuracy class is not required. Hence, we propose energy meter with 0.5 accuracy class. Please accept the same.	
471.	Volume-IV - Technical Specificatio n	Chapter-18 Sub- Clause. 18.10.9.5 & Sub-Clause- 18.10.9.4 Page (38/213)	Filing Accountings	There is no specification on the requirement of filings and accountings in the tender. Please clarify the requirement.	These facilities should be provided and the contractor shall give required details to the Engineer for review and approval. The Tender Conditions shall prevail.
472.	Volume-IV - Technical Specificatio n	Chapter-18 Sub-Clause. 18.17.1.2,f Page (59/213)	Each RSS RTU/gateway shall have necessary redundant communication port for transmit RSS data (analogue data, metering data and CBs Operating Status only) to MPPTCL SLDC through wireless communication over Web network with Firewall protection for the purpose of remote viewing only. Any modem or wireless communication device and Firewall for external interface shall be	Kindly provide the location and architecture for the given requirement.	Corrigendum is being issued separately



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			supplied by Traction Power Supply Contractor.		
473.	Volume-IV - Technical Specificatio n	Chapter-18 Sub- Clause 18.17.2.3 Page (61/213)	b. IEC 60870-5-103 Protocol for communication with Relays. c. IEC 61850 for communication with Relays/IEDs, Stray Current Device etc.	Kindly clarify whether IEC 103 protocol or IEC 61850 protocol to be used for relay/IED communication.	Corrigendum is being issued separately
474.	Volume-IV - Technical Specificatio n	Chapter-18 Sub Clause 18.17.3.12 Page (62/213)	Each RTU shall be supplied complete with 20% spare I/O signals capacity or min. 1 spare card of each type complete with RTU internal wiring and termination for handling additional input and output signals. Expansion by at least 50% of the initial capacity shall be possible simply by adding more input/output modules and recon figuring the software. A further 100% expansion shall be possible by adding additional interfacing equipment in additional cabinets, etc. and reconfiguration of the software. Each RTU shall be supplied with min. 2 spare DIN Rails or mounting	As per our understanding, installed capacity shall be 100% installed+20% installed spares and the there shall be space/provision for expansion of 50% in future. However any additional modules or components or cabinets to be installed shall be considered as variation in requirement. Kindly confirm.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			channels for mounting of I/O modules, MCBs, Terminal blocks etc.		
475.	Volume-IV - Technical Specificatio n	Chapter-18 Sub Clause. 18.18.2.8 Page (67/213)	Traction Power Supply Contractor shall interface with Telecom contractor during project implementation stage for all the requirements as per SCADA Dedicated FO network design. Telecom contractor shall provide needful support during SCADA network integration testing/interface test support during commissioning of dedicated FO network.	We understand that the Telecom connectivity up to RSS premises shall be extended by Telecom Contractor. Afterwards, network will be managed by Traction Contractor. Kindly confirm.	Please refer Item No 4 of Table 3.8 Chapter 3 Interfaces of Vol-IV Technical Specifications. The Tender Conditions shall prevail.
476.	Volume-IV - Technical Specificatio n	Chapter 18, Sub Clause .18.4.1.3.3, Sub Clause 18.8.4.2, Sub Clause 18.8.4.3 Page (69 /213)	18.4.1.3.3 Communication Network (To be provided by S&T contractor) 18.8.4.2 Traction power supply contractor is required to interface with designated telecom contractor to ensure the provision of necessary dedicated/ dark fibre cores in the redundant FO communication backbone under the scope of telecom contractor. Traction power supply contractor shall	The given clauses are contradictory. However, we understand that dedicated fibre/ Dark fibre network is under the scope of Traction Power supply contractor and traction power supply contractor shall interface with Telecom contractor for necessary Dark fibre cores in the communication backbone provided by Telecom contractor. Kindly confirm.	Armoured FO cable shall be provided with LIU at both ends between RTU (at ASS/TSS/RSS) and Telecom room by the telecom contractor. Power Supply & Traction Contractor has to interface with the respective contractors. Wherever Data Cable (Copper) is required between RTU and Telecom



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			also interface with designated telecom con-tractor to ensure the provision of communication ports in UP & Down Track optical distribution frame (ODF) rack at TER of station, depot & OCC/BCC. 18.8.4.3 The communication between OCC/BCC and RTU at controlled stations shall be achieved through OFC network to be provided by designated tele-communication contractor. The Traction Power Supply Contractor is required to interface with designated telecom contractor to ensure the provision of necessary channel requirement.		room, the same shall be provided by contractor. The Tender Conditions shall prevail.
477.	Volume-IV - Technical Specificatio n	Chapter 18, Sub-Clause. 18.18.5.2, Page (71/213)	NMS shall be a set of dedicated servers and a network management software. The NMS shall have simple browser-based user interface to provide all the required information of SCADA dedicated	As per the BoQ, item A12, preamble NMS does not describe the requirement of a dedicated server. Kindly clarify the requirement.	NMS required dedicated servers and deemed to be included in price bid of respective item. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			network nodes. The NMS shall not impact the availability and performance of SCADA system.		
478.	Volume-IV - Technical Specificatio n	Chapter 18, Sub-Clause. 18.19.2.1 Page (74/ 213)	An external network attached storage facility with removable storage media shall be provided at the OCC& BCC for the historical storage and backup of database records and software.	As per understanding, of network attached mass external storage, we need to consider NAS (Network Attached Storage Drive)/Tape loader. Kindly clarify.	Archive work station shall be provided to store historical data in OCC and BCC. NAS (network Attached Storage Drive) can also be provided. The Tender Conditions shall prevail.
479.	Volume-IV - Technical Specificatio n	Chapter 18, Sub-Clause. 18.20.1.1 Page (83 /213)	Traction contractor shall interface with designated S&T contractor for the requirement of Uninterrupted Power Supply (UPS) feeder for Traction SCADA system at OCC.	We understand that , the UPS shall be provided by S & T contractor for OCC and BCC and Traction power supply contractor scope confines to power supply cables, Distribution board etc for extension of power supply room for SCADA equipments in server room. However the power supply distribution cables, ACDB, DCDB etc. for SCADA equipments at training simulator room, theatre room, BCC	Please refer Item No 15 Table 3.7 Chapter 3 Interfaces Vol-IV Technical Specifications. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				Control room shall be provided by a different contractor and not in scope of Traction power supply contractor. Kindly confirm.	
480.	Volume-IV - Technical Specificatio n	Chapter 18, Sub-Clause. 18.25.7.1 (91/213)	Traction Power Supply Contractor shall coordinate with station building contractor for requirement of cable route and support for RTU communication with TER at stations. The designated station / E&M contractor shall provide cable route and install support (metallic cable tray, conduit etc.) for RTU communication from RTU panel to Telecom Equipment Room at stations.	We understand that the conduit, trays for laying FO cables for SCADA communication shall be provided by respective E & M contractor. Kindly confirm.	Please refer Table No 3.4 (Item No 4) chapter 3 Interfaces of Vol-IV Technical Specifications. The Tender Conditions shall prevail.
481.	Volume-IV - Technical Specificatio n	Chapter 18, Sub-Clause. 18.27.1.3 (95/213)	Supply of Local SCADA hardware & software shall be in the scope of Traction Power Supply Contractor whereas all RSS equipment's, Intelligent electronic devices (IEDs),	We understand that the scope for Supply, installation, testing and commissioning of Receiving substation equipment (AIS/GIS) including civil works lies with scope of	Corrigendum is being issued separately



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			Bay control units (BCU) and Protection control units (PCU) is in the scope of RSS contractor. Kindly refer Interface chapter of Tender specifications for detailed interface requirements of RSS SCADA and Traction Power Supply Contractors.	Traction Power supply contractor. Kindly Confirm. Also, please clarify the RSS Contractor in the clause given.	
482.	Volume-IV - Technical Specificatio n	Chapter 18, Sub-Clause. 18.27.17.2 Page (106 /213) Sub-Clause 18.2, Standards, Page (2/213)	The SCADA system shall be compliant with Cyber Security industry Standards such as NERC, CIP, CERT-In, IEC 62443. Bidders shall provide detailed description of Cyber Security features supported by their offered system and what has been considered for delivery based on the specification.	 IEC 62443-5 does not exist, please specify which sub-part to be considered. Please provide cyber security compliance standard part/document of IEC 62443 to be complied for RTU, Switches, firewall. 	Corrigendum is being issued separately
483.	Volume-IV - Technical Specificatio n	General	-	The Mean Time To Repair (MTTR) is the time needed to repair a failed component. In an operational system, repair generally means replacing a	Please refer Clause No 2.5.14.2 Vol-IV Technical Specifications.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				failed part. Thus, switchgear panel system MTTR could be viewed as mean time to replace a failed switchgear component. We do not provide statistic on MTTR as it depends on many parameters not directly under the control of the manufacturer (availability of spares parts at customer premises, transport lead time of replacement part, maintenance schedule, maintenance contract and shut down availability etc). Please note that above statement does not include lead time for procurement of the defective material.	The Tender Conditions shall prevail.
484.	Volume-IV - Technical Specificatio n	General	-	We understand castle key based interlock would be required only for transformer feeders 33kV VCB, Transformer door and LV side CB interlocking. Please confirm.	The Tender Conditions shall prevail.
485.	Volume-IV - Technical	General	-	Routine testing of bought out equipments shall be carried out by	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Specificatio n			respective vendors and test certificates shall be furnished for your review along with our test reports. We do not envisage further testing of bought out equipments.	
486.	Volume-IV - Technical Specificatio n	General	-	Special tools, Testing & Diagnostic equipment, Measuring equipment etc. are not envisaged in our scope. Metering door key, Racking Handle, Earthing switch handle as tools for Operation & Maintenance	Please refer BOQ Bill No. IN- 9.1, Item No, E.1 The Tender Conditions shall prevail.
487.	Volume-IV - Technical Specificatio n	General		We understand that cable containment, cable bracket/hanger/supports/cable trays etc. will be provided by E&M contractors. Successful bidder of this contract will interface with respective contractors and lay the cables only. Please confirm	Please Refer Chapter 3 Interfaces Vol-IV Technical Specifications. The Tender Condition Shall Prevail
488.	Volume-IV - Technical Specificatio	General		We understand that Auxiliary Substations (ASSs -02 nos.) will be located at platform level for	Please refer Clause No 14.1.2 of Chapter 14, Vol-IV Technical Specifications.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	n			underground Stations, and at concourse level for elevated station (ASS 01 no. comprises both circuits). Kindly confirm.	The Tender Conditions shall prevail.
489.	Volume-IV - Technical Specificatio n	General		We understand that Incoming 33kV feeder cables will be protected with line differential protection as main protection and OC & EF protection (directional) as backup protection. Please confirm.	Ring 33kV feeder cables will be protected with line differential protection as main protection and OC & EF protection (directional) as backup protection. Please refer relevant SLD. The Tender Conditions shall prevail.
490.	Volume-IV - Technical Specificatio n	General		We understand that Transformer shall be protected with Transformer differential protection & REF protection as main protection and OC & EF protection as backup protection. Please confirm.	Transformer shall be protected with Transformer differential protection & REF protection as main protection and OC & EF protection as backup protection. Please refer relevant SLD. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
491.	Volume-IV - Technical Specificatio n	General		We understand that cable containment, cable bracket/hanger/supports/cable trays etc. in the tunnel, Ramp, viaduct, under croft etc. will be provided by E&M contractors. Successful bidder of this contract will interface with respective contractors and lay the cables only. Please confirm.	Please Refer relevant Table of Chapter 3 Interfaces of Vol-IV Technical Specifications. The Tender Conditions shall prevail.
492.	Volume-IV - Technical Specificatio n	General		Lifting hook/hoisting facilities (if any) required in Underground station/elevated station will be provided by Station Building contractor. Please confirm.	Please Refer Item No 5 of Table No. 3.8 & 3.4 respectively of Chapter 3 Interfaces of Vol-IV Technical Specifications. The Tender Conditions shall prevail.
493.	Volume-IV - Technical Specificatio n	General		Type Test Reports - Validity of Type test reports are specified in the specification, generally type test reports shall not be older then 5 years. The repetition of type test is	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				not required if valid reports are available. Please confirm.	
494.	Volume-IV - Technical Specificatio n	General		Please provide a list of all type of material/fixtures suggested make and standard drawings if any.	Relevant standard has been already covered in respective clauses of Vol-IV (Technical Specification). The Tender Conditions shall prevail.
495.	Volume-IV - Technical Specificatio n	General		Design & Engineering shall be based on detail of Work given in tender documents. In a situation when Tender Specifications are silent, bidder shall satisfy the minimum requirement in IS standards. If such standards are required to be exceeded as per Employer requirement after bidding, the same shall be eligible for additional claim beyond the provision of Contract.	The bidder shall satisfy the minimum requirement in IS standards. The Tender Conditions shall prevail.
496.	Volume-IV - Technical Specificatio	General		In tender document requirement of parking is not given. Please provide the requirement with detail if any	Parking space shall be provided as given in the Sub-Clause 11.7.4 of Chapter-11



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	n				of Vol-III. The Tender Conditions shall prevail.
497.	Volume-IV - Technical Specificatio n	General		Please specify the requirement of OH water tank and capacity for control room building.	The contractor to propose during construction stage for approval of the Engineer. The Tender Conditions shall prevail.
498.	Volume-IV - Technical Specificatio n	General		As this tender is BOQ based, in case of any variation in quantity the bidder can claim the variation order. Please confirm.	Any variation shall be dealt as per relevant contract conditions. The Tender Conditions shall prevail.
499.	Volume-IV - Technical Specificatio n	General	Price Basis	Considering current volatility in commodity, we strongly recommend for Variable prices with Price Variation formula for Aluminium wound transformer since the delivery completion of transformer is more than 1 year.	The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
500.	Volume-IV - Technical Specificatio n	General	Most of the specifications calls for the 5 years validity for the type test report.	As per CEA Guidelines File No.CEA-PS-14-80/1/2019-PSETD Division-Part(2)/517-96 dated 17/09/2021 the type test validities are already defined by Govt. of India. We request to accept the same for this tender.	Corrigendum is being issued separately.
501.	Volume-IV - Technical Specificatio n	General	BOQ_102664	BOQ IN3.1 Item No A.1 is totally contradictory with respect to panel quantity and station quantity. Kindly clarify.	Key SLD (Drg. No. I202-BIG-TRP-00- DWG- ASSSLD1-00311/R00) for type-F Auxiliary Sub-Station (ASS) revised. Corrigendum is being issued separately.
502.	Volume-IV - Technical Specificatio n	General	-	Kindly confirm whether Depot Switchboard is 2 separate switchboard (i.e ASS and TSS separately) or Single switchboard with ASS/TSS. Kindly clarify along with scheme and type and the Panel quantity for Depot. Presently we are assuming Gandhi Nagar Depot as separate switchboard as per Type E	Depot ASS and Depot TSS are in different buildings. Please refer relevant drawings. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				ASS+TSS. Please confirm is our understanding is correct.	
503.	Volume-IV - Technical Specificatio n	General	-	Gandhi Nagar station as per "33kV Power supply SLD" has 3 Aux transformer where as in "Typical Key protection SLD of elevated ASS+TSS Type A" and in Chapter 2 Table 2.1 Page 14 of 25 only 2 Aux transformer are mentioned. Kindly clarify.	Typical 33kV Power Supply SLD (Drg. No. I202-BIG- TRP-00- DWG- ATSSLD1- 00103/R00) revised. Corrigendum is being issued separately.
504.	Volume-IV - Technical Specificatio n	General		khajrana Square station as per "33kV Power supply SLD" has 3 Aux transformer where as in "Typical Key protection SLD of elevated ASS+TSS Type A" and in Chapter 2 Table 2.1 Page 15 of 25 only 2 Aux transformer are mentioned. Kindly clarify.	Typical 33kV Power Supply SLD (Drg. No. I202-BIG- TRP-00- DWG- ATSSLD1- 00103/R00) revised. Corrigendum is being issued separately.
505.	Volume-IV - Technical Specificatio n	General		2 For 4 KVA UPS, please confirm the battery capacity or provide the following details to size suitable batteries a. UPS KVA rating	Technical Parameter – 4kVA UPS



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarif	ication
				 b. Max & minimum DC Voltage c. Minimum & Max temperature d. Power Factor e. Inverter efficiency f. End Cell Voltage g. Design margin if any h. Aging factor 	Parameter UPS KVA Rating Max. & Minimum DC Voltage Minimum & Maximum Temperature Power Factor Inverter efficiency End Cell Voltage Ingress protection Aging Factor	Range or value 4 KVA 240 V ± 5% Operating Temperature: 0 to 40 deg C. Storage Temperature: 0 to 70 deg C >0.99 >95% 1.41 V IP 20 1.25
506.	Volume-IV - Technical Specificatio n	General	Approval of New Vendor	Kindly elaborate the new vendor/supplier approval procedure.	1.2 of Vol-V, C of Vol-III and a requirement p relevant techn specification to for review and contractor is re furnish those a documents als by the Engine review at the t	edentials as oter-1 clause no Clause no 10.9 also in line with rovided in ical o the Engineer approval. The equired to additional so as advised er for their



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
					Engineer shall be final and binding. The Tender Conditions shall prevail.
507.	Volume-IV - Technical Specificatio n	General	Liaisoning work with MPPTCL, CEIG and Distribution Company	We understand that except CEIG approval, any other lesioning works with MPPTCL/Distribution Company/any other authority towards getting approval of drawings/ towards commissioning the project, is not in Contractor's scope. Please confirm if our understanding is correct.	The contractor shall interface with the statutory authorities and the Engineer / Employer will support. Please refer Clause no 3.2.11 of Chapter-3 Interfaces of Vol IV-Technical Specifications. The Tender Conditions shall prevail.
508.	Volume-IV - Technical Specificatio n	General	Prevailing of BoQ	If in case of any discrepancy amongst the specification, Drawing & Bill of quantity. The Description in Bill of quantity will prevail. Kindly confirm the same.	Technical Specifications has precedence over the drawing and drg has precedence over the BOQ. Please refer Clause no 1.5 (Priority of Documents) of Volume II – Conditions of Contract (GC and PC). The Tender Conditions shall



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
					prevail.
509.	Volume-IV - Technical Specificatio n	General	Requirement of Type tests	Kindly confirm that the validity of type tests for major equipment which shall be accepted less than 10 years till the bid submission date.	Corrigendum is being issued separately.
510.	Volume-IV - Technical Specificatio n		Switching Transient Protection	We strongly recommend to have Ph-Ph & Ph-E Surge Arrestors or Transient Voltage Protection (TVP) installed in the transformer to protect the transformer from Transient Voltages. Please refer below links for more details https://youtu.be/IKSrZZ8HcoA	Refer Protection SLDs, surge arrestor already prescribe at 132 kV incomer as well as primary of Power Transformer. The Tender Conditions shall prevail.
511.	VOLUME - V Material and Workmansh ip Specificatio ns	Sub Clause 1.2.3, Page (4 / 47)	Type test certificates shall be submitted for all major equipment and the certificates shall not have been issued beyond five (05) years from the date of supply.	Validity of Type test certificates should be as per CEA guidelines. Kindly confirm	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
512.	Vol-VI: Tender Drawings	I202-BIG- TRP-00- DWG- RSSSLD1- 00002	TYPICAL 132KV SINGLE LINE DIAGRAM FOR RSS (AIS)	The winding configuration in Technical Specifications is YNyn0+ d whereas in tender drawings is YNyn0d. Kindly clarify.	Corrigendum is being issued separately.
513.	Vol-VI: Tender Drawings	I202-BIG- TRP-00- DWG- RSSSLD1- 00002 I202-BIG- TRP-00- DWG- RSSSLD1- 00003	TYPICAL 132KV SINGLE LINE DIAGRAM FOR RSS (AIS) TYPICAL SLD FOR 132 KV RSS - AIS TYPE WITHPROTECTION	Number of cores for CT's shown in both drawings are mismatching. Kindly confirm the same.	I202-BIG- TRP-00-DWG-RSSSLD1- 00002 is only indicative SLD. No of CTs core shall be as per protection SLD drawing no I202-BIG- TRP-00- DWG-RSSSLD1- 00003. The tender conditions shall prevail
514.	Vol-VI: Tender Drawings	I202-BIG- TRP-00- DWG- RSSSLD1- 00003	TYPICAL SLD FOR 132 KV RSS - AIS TYPE WITHPROTECTION	Kindly confirm the type of PT used for metering (inductive type/CVT).	PT shall be inductive type for metering bay.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
515.	Vol-VI: Tender Drawings	I202-BIG- TRP-00- DWG- RSSSLD1- 00004	TYPICAL AIS - SLD OF 33KV SIDE MAIN SWITCHBOARD WITH PROTECTION (SHEET 2 OF 2)	We understand all the protections can be clubbed to single core in 33kV outgoing. Kindly confirm	Please check referred drawing. There is separate cores each for overcurrent, earth fault, directional protection and differential protection (87C) and also provision for spare core is given. The Tender Conditions shall prevail.
516.	Vol-VI: Tender Drawings	I202-BIG- TRP-00- DWG- RSSSLD1- 00016	TYPICAL SLD FOR 132 KV RSS - GIS TYPE WITH PROTECTION (SHEET 2 OF 2)	The CT and PT in metering bay doesn't need the protection relays. Kindly amend the drawing	The CT and PT in metering bay for only metring purpose. There are separate provision for Protection CT and PT. Please refer the relevant Protection SLDs. The Tender Conditions shall prevail.
517.	Vol-VI: Tender Drawings	I202-BIG- TRP-00- DWG- RSSSLD1-	TYPICAL SLD FOR 132 KV RSS - GIS TYPE WITH PROTECTION (SHEET 2 OF 2)	The details of second core in PT is not available. We understand that both the cores are for metering purpose only. Kindly	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		00016		confirm.	
518.	Vol-VI: Tender Drawings	I202-BIG- TRP-00- DWG- RSSSLD1- 00016	TYPICAL SLD FOR 132 KV RSS - GIS TYPE WITH PROTECTION (SHEET 2 OF 2)	Kindly confirm the type of Lightning Arrestor (indoor or outdoor type) on 132kV incomer side.	Lightning/surge arrestor shall be outdoor type in the yard.
519.	Vol-VI: Tender Drawings	I202-BIG- TRP-00- DWG- RSSSLD1- 00016	TYPICAL SLD FOR 132 KV RSS - GIS TYPE WITH PROTECTION (SHEET 2 OF 2)	The items shown in drawing is not matching with description in technical specifications. Kindly clarify.	Corrigendum is being issued separately.
520.	Vol-VI: Tender Drawings	Drg No: I202- BIG-TRP-00- DWG- RSSSLD1- 00003 Drg No: I202- BIG-TRP-00- DWG- RSSSLD1- 00016		Power transformer primary neutral CT, LA & disconnectors are shown only in drawing no - I202-BIG-TRP-00-DWG-RSSSLD1-00016 (SLD of 132kV GIS type RSS. As per 132kV AIS RSS SLD, price schedule & layout drawings the power transformer primary neutral CT, LA & neutral disconnectors are not required. Please clarify the exact requirement & update the SLD &	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		Power transformer primary neutral LA & neutral disconnector		price schedule if required.	
521.	Vol-VI: Tender Drawings	Drg No: I202- BIG-TRP-00- DWG- RSSSLD1- 00016		Bidder understands that, as per the referred SLD, separate GIS metering bay is required for PSA. Request to include the same in the BOQ/Price schedule.	Utility metering portion is under the scope of Power Supply & Traction Contractor. Metering part may be inside panel type or out side bay type as per PSA requirement. Power Supply & Traction Contractor shall interface with power supply authority for the same including accuracy class of energy meters. The Tender Conditions shall prevail.
522.	Vol-VI: Tender Drawings	I202-BIG- TRP-00- DWG-	TYPICAL SLD FOR 132 KV RSS - GIS TYPE WITH PROTECTION (SHEET 2 OF 2)	Kindly clarify if the outdoor type metering bay on incoming side is in the scope of IN09 contractor	Utility metering portion is under the scope of Power Supply & Traction Contractor.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		RSSSLD1- 00016			Metering part may be inside panel type or out side bay type as per PSA requirement. Power Supply & Traction Contractor shall interface with power supply authority for the same including accuracy class of energy meters. The Tender Conditions shall prevail.
523.	Vol-VI: Tender Drawings	I202-BIG- TRP-00- DWG- ATSSLD1- 00103	33 kV POWER SUPPLY SLD FOR INDORE METRO YELLOW LINE	Drawings mentions 15% impedance. Kindly clarify the contradiction. Impedance [%] shall be 12.5% with (± 7.5% IEC Tol.) @ 25MVA base at Normal tap. Please confirm	Corrigendum is being issued separately.
524.	Vol-VI: Tender Drawings	I202-BIG- TRP-00- DWG- ATSSLD1- 00103	33 kV POWER SUPPLY SLD FOR INDORE METRO YELLOW LINE	33kV bus at Khajrana Square station and Gandhinagar Station have two CB for coupling. Kindly confirm.	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
525.	Vol-VI: Tender Drawings	I202-BIG- TRP-00- DWG- ATSSLD1- 00103	33 kV POWER SUPPLY SLD FOR INDORE METRO YELLOW LINE	We understand that VLD shall be installed in each Station, however VLD has been shown at few stations (ASS type only) like Palasia Square, Chota Ganpati etc. and is missing in drawings for stations Super Corridor 3, Bapat Square etc. Kindly confirm.	Corrigendum is being issued separately.
526.	Vol-VI: Tender Drawings	Tender drawing - TYPICAL EQUIPMENT LAYOUT FOR DEPOT TSS - I202- BIG-TRP-00- DWG- TSSLYT1- 00213 TYPICAL SLD FOR TYPE E TRACTION	Depot TSS	As per referred layout of Depot TSS, we understand that 1 nos. of 4 panel 33kV switchboard shall be provided at Depot TSS which is as follows: Switchboard -1 - Incomer from RSS, 2# Outgoing to Traction transformer, Outgoing/looping feeder to Depot ASS. Though the above configuration is matching with BPS it is contradicting with Typical SLD - TYPICAL SLD FOR TYPE E TRACTION SUBSTATION - I202-BIG-TRP-00-DWG-TSSSLD1-00209. In this	Referred SLD Type E Traction Sub - Station and Typical Equipment Layout for Depot TSS are same. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		SUBSTATIO N - I202-BIG- TRP-00- DWG- TSSSLD1- 00209		regard we request MPMRCL to check & update the SLD in line with the layout & BPS requirements. Please confirm whether bidder's understanding is in order.	
527.	Vol-VI: Tender Drawings	Tender drawing - TYPICAL EQUIPMENT LAYOUT FOR DEPOT TSS - I202- BIG-TRP-00- DWG- TSSLYT1- 00213	Depot TSS	As per referred layout, ACDB & DCDB is not shown for Depot TSS. However, as per price schedule, Type-5 ACDB & DCDB shall be provided at Depot TSS. Please check and revise the layout accordingly.	ACDB & DCDB is shown in the referred drawing for Depot TSS. The Tender Conditions shall prevail.
528.	Vol-VI: Tender Drawings	Tender drawing - TYPICAL SLD FOR TYPE C AUXILIARY	Type-C	As per referred SLD, Tie feeder is shown between ASS-1 & ASS-2 at UG stations. However, as per referred protection SLD, Bus section feeder is shown	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		SUBSTATIO N - I202-BIG- TRP-00- DWG- ASSSLD1- 00305 TYPICAL KEY PROTECTIO N SLD OF UNDERGRO UND ASS TYPE C - I202-BIG- TRP-00- DWG- ASSSLD1- 00306		between ASS-1 & ASS-2 at UG station. As ASS-1 & ASS-2 are located in different rooms, we presume it to be a Tie feeder. Please check and revise the protection SLD accordingly.	
529.	Vol-VI: Tender Drawings	Tender drawing - TYPICAL SLD FOR TYPE F	Type-F	a) As per referred SLD, 2 Nos. of 4 panel switchboard is shown for depot ASS. However, as per referred protection SLD, 5 panel switchboard is shown for depot ASS. Please	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		AUXILIARY SUBSTATIO N - I202-BIG- TRP-00- DWG- ASSSLD1- 00311 TYPICAL KEY PROTECTIO N SLD OF ELEVATED ASS TYPE F - I202-BIG- TRP-00- DWG- ASSSLD1- 00312		check and clarify the actual number of 33kV panel at Depot ASS.	
530.	Vol-VI: Tender Drawings	Tender drawing - TYPICAL SLD FOR	Type-F	As per referred SLD, 2 Nos. of 4 panel switchboard is shown for depot ASS and future traction transformer is shown inside the Depot ASS.	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		TYPE F AUXILIARY SUBSTATIO N - I202-BIG- TRP-00- DWG- ASSSLD1- 00311 TYPICAL KEY PROTECTIO N SLD OF ELEVATED ASS TYPE F - I202-BIG- TRP-00- DWG- ASSSLD1- 00312		However, as separate Depot TSS is provided. Please clarify why future traction transformer feeder is required in Depot ASS.	
531.	Vol-VI: Tender Drawings	Tender drawing - TYPICAL	Type-F	As per referred SLD, two incomers are shown from RSS to Depot ASS. However, as per Gandhinagar AMS	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		SLD FOR TYPE F AUXILIARY SUBSTATIO N - I202-BIG- TRP-00- DWG- ASSSLD1- 00311 TYPICAL AIS - SLD OF 33KV SIDE MAIN SWITCHBO ARD WITH PROTECTIO N (SHEET 2 OF 2) - I202- BIG- TRP- 00-DWG- RSSSLD1- 00004		SLD - I202-BIG-TRP-00-DWG-RSSSLD1-00004, Only one outgoing feeder is shown for depot ASS. Please check and clarify.	



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
532.	Vol-VI: Tender Drawings	Tender drawing - TYPICAL EQUIPMENT LAYOUT FOR DEPOT ASS - I202- BIG-TRP-00- DWG- ASSLYT1- 00321	Depot ASS	As per referred layout of Depot ASS, we understand that 2 nos. of 3 panel 33kV switchboard shall be provided at Depot ASS as follows: a) Switchboard -1 - Incomer from RSS, Outgoing to Auxiliary transformer & Outgoing to OCC ASS b) Switchboard -2 - Incomer from Depot TSS, Outgoing to Auxiliary transformer & Outgoing to Auxiliary transformer & Outgoing to OCC ASS Though the above configuration is matching with BPS it is contradicting with Typical SLD. In this regard we request MPMRCL to check & update the SLD in line with the layout & BPS requirements.	Corrigendum is being issued separately.
533.	Vol-VI: Tender Drawings	Tender drawing - TYPICAL EQUIPMENT LAYOUT	OCC ASS	As per referred layout of OCC ASS, we understand that 2 nos. of 3 panel 33kV switchboard shall be provided at OCC ASS as follows:	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		FOR OCC ASS - I202- BIG-TRP-00- DWG- ASSLYT1- 00322		a) Switchboard -1 - Incomer from Depot ASS, Outgoing to Auxiliary transformer & Tie feeder b) Switchboard -2 - Incomer from Depot ASS, Outgoing to Auxiliary transformer & Tie feeder Please confirm whether bidder's understanding is in order.	
534.	Vol-VI: Tender Drawings	Tender drawing - TYPICAL EQUIPMENT LAYOUT FOR OCC ASS - I202- BIG-TRP-00- DWG- ASSLYT1- 00322	OCC ASS	As per referred Layout, RTU - Type-3 is shown for OCC ASS. However, Type -3 RTU is applicable for Underground ASS. In this regard, please check and clarify whether any separate RTU need to be provided at OCC ASS. If yes, please specify which type of RTU that need to be provided at OCC ASS and update the RTU quantity accordingly in price schedule.	Corrigendum is being issued separately.
535.	Vol-VI: Tender Drawings	TYPICAL SLD FOR 132 KV RSS	Utility metering portion	We understand that the utility metering portion shown in the drawing is excluded from IN09 tender	Utility metering portion is under the scope of Power Supply & Traction Contractor.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		- GIS TYPE WITH PROTECTIO N (SHEET 2 OF 2)	Macro recommend of the second	scope and the shown part is at PSA end. Please confirm.	Metering part may be inside panel type or out side bay type as per PSA requirement. Power Supply & Traction Contractor shall interface with power supply authority for the same including accuracy class of energy meters The Tender Conditions shall prevail.
536.	Vol-VI: Tender Drawings	IN09_Vol_ VI_Part 01 of 02 Typical SLD of 132kV (GIS) of RSS	Bus disconnector and earthing switch	Please note in case of transformer and line bay bus disconnector and earthing switches should be one set only however tender SLD show two sets. Therefore, we understand only single set is required. Kindly confirm.	It is typical drawing. Line bay disconnector and earthing switch should be two sets viz one set for each bus bay. The Tender Conditions shall prevail.
537.	Vol-VI: Tender Drawings	IN09_Vol_ VI_Part 01 of 02 Typical SLD of 132kV (GIS) of RSS	CT parameters	Please specify the knee point voltage for protection core and ISF required for metering.	This is Vendor specific parameter. The Contractor will propose these parameters as a part of GTP for final approval of Engineer. The Tender Conditions shall



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
					prevail.
538.	Vol-VI: Tender Drawings	IN09_Vol_ VI_Part 01 of 02 Typical SLD of 132kV (GIS) of RSS	Surge arrestor	We understand surge arrestor is not to be provided for transformer bays. Kindly confirm.	Your understanding is not correct. Out door type Surge arrestor is required and shall be provided at transformer Bay. The Tender Conditions shall prevail.
539.	Vol-VI: Tender Drawings		Supply with 132 kV Cable/ 132 kV Overhead Line in the RSS	Though supply to RSS is not in Contractor's Scope, please make our understanding correct i.e. whether supply to RSS will be through 132 kV Cable as it was shown in the layout with termination or overhead transmission line.	At MR10 Flyover RSS and Khajrana RSS, power supply from GSS may be through 132kV cable works tentatively. However, the Power Supply & Traction Contractor shall properly interface (Chapter 3- Vol-IV Interfaces) with Power Supply Authority (PSA) in this regard.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		132 kV Overhead Line			
540.	Vol-VI: Tender Drawings	IN09_Vol_VI _Part 01 of 02 (Towards referring AIS type SLD & Layout for RSS) Structural arrangement of 132 kV Bus	Shown with Structure/ Isolator	Is vendor allowed with High Level Isolator.	Generally, 132 KV Isolator is mounted on structure in case of AIS type RSS. Refer technical specification on Isolators under Volume IV. The Tender Conditions shall prevail.
541.	Vol-VI: Tender Drawings	IN09_Vol_VI _Part 01of 02 Typical SLD of 132kV(GIS) of RSS	Bus disconnector and earthing switch	Please note in case of transformer and line bay bus disconnector and earthing switches should be one set only however tender SLD show two sets. So we understand we provide only single set of the same. Please confirm.	Bay bus disconnector and earthing switches shall be as per Tender drawings. The Tender Conditions shall prevail.
542.	Vol-VI:	IN09_Vol_VI	CT parameters	Please specify the knee point voltage	This is Vendor specific



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
	Tender Drawings	_Part01 of 03 Typical SLD of 132kV(GIS) of RSS		for protection core and ISF required for metering one.	parameter. The Power Supply & Traction Contractor will propose these parameters as a part of GTP for final approval of Engineer. The Tender Conditions shall prevail.
543.	Vol-VI: Tender Drawings	IN09_Vol_VI _Part01 of 04 Typical SLD of 132kV(GIS) of RSS	Surge arrestor	We understand surge arrestor is not to be provided for Transformer bays. Kindly confirm.	The Tender Conditions shall prevail.
544.	Vol-VI: Tender Drawings	IN09_Vol_VI _Part01of05 Typical SLD of 132kV(GIS) of RSS	Cable runs	We understand all typically are with single run of cables. Kindly confirm.	132kV cable work is under the scope of Power Supply Authority (PSA). Refer details of other cables like 33kV, 750V DC cables etc indicated in relevant drawings and technical specification (Vol IV). The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
545.	Vol-VI: Tender Drawings	IN09_Vol_VI _Part01of06 Typical SLD of 132kV(GIS) of RSS	Dummy Plug	Please clarify what does dummy plug mean	Dummy plug is used for any outdoor use or offshore connection. The Tender Conditions shall prevail.
546.	Vol-VI: Tender Drawings		TYPICAL SLD FOR 132 KV RSS - AIS TYPE WITH PROTECTION (SHEET 2 OF 2)	In the drawing the transformer rating is mentioned as 40/50MVA (FOR SUBHASH NAGAR) 25/31.5MVA	Corrigendum is being issued separately.
547.	Vol-VI: Tender Drawings	Transformer Rating for Gandhinagar , ISBT/MR10 Flyover, and Khajrana Square		(FOR KAROND & RATNAGIRI) Kindly confirm the actual rating of transformers	Corrigendum is being issued separately.
548.	Vol-VI: Tender Drawings (Volume IV & V)	Chpater-3 - Interface, Table : 3.8: Interfacing with Telecom Contractor,	Control & Monitoring data exchange Traction and Power Supply Contractor: Will supply and install suitable copper cables for connection from RTU to optic fibre converter at each station telecom equipment room (from ASS, Traction	As per referred drawing, Armoured FO cable shall be provided with LIU between RTU & Telecom room. There is no copper cable requirement between RTU & Telecom room. In this regard, we understand that	Armoured FO cable shall be provided with LIU at both ends between RTU (at ASS/TSS/RSS) and Telecom room by the telecom contractor. The contractor



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		SI No. 2 Tender drawing - GENERAL RTU SCHEMATIC - I202-BIG- TRP-00- DWG- SCDSCH1- 00602	Switching Stations The station nearest to RSS, for connection from the RSS) Telecom contractor: Will supply and install optic fibre cables, including the channels required for C&M data exchange. Will also supply and install optic fibre converters at each station Telecom Equipment Room the Depot control room	Armoured FO cable including LIU at both ends shall be provided by telecom contractor at ASS, TSS, Depot ASS, Depot TSS, & RSS to first ASS. Please confirm.	has to interface with the respective contractors. Wherever Data Cable (Copper) is required between RTU and Telecom room, the same shall be provided by the contractor. The Tender Conditions shall prevail.
549.	Vol-VI: Tender Drawings	Chpater-3 - Interface, Table: 3.8: Interfacing with Telecom Contractor, SI No. 2 Tender drawing - GENERAL RTU SCHEMATIC - I202-BIG-	Control & Monitoring data exchange Traction and Power Supply Contractor: Will supply and install suitable copper cables for connection from RTU to optic fibre converter at each station telecom equipment room (from ASS, Traction Switching Stations The station nearest to RSS, for connection from the RSS) Telecom contractor: Will supply and install optic fibre cables, including the channels required for C&M data exchange. Will also supply and	At RSS, all the necessary signals shall be made available up to the RTU. Further, communication to the Telecom equipment/OCC/ODF as shown in the referred drawing shall be in other contractor scope. Please confirm.	Telecom Contractor shall provide the connectivity between RTU at RSS to OCC/BCC. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		TRP-00- DWG- SCDSCH1- 00602 Drawing - I202-BIG- TRP-00- DWG- SCDLYT1- 00605 - TYPICAL SCADA CONTROL CENTRE - ARCHITECT URE(OCC/B CC)	install optic fibre converters at each station Telecom Equipment Room the Depot control room		
550.	Vol-VI: Tender Drawings	Volume 6, Part 2 of 2, Drawing I202-BIG- TRP-00- DWG-	As per the SCADA architecture, the communication and database servers are redundant, however as per the BoQ, the communication and database servers required is standalone type. As per the SCADA architecture, the	Kindly clarify the requirement	Refer Explanatory Notes To Bill Of Quantities, Clause 2.9 SCADA, Sub Clause 2.9.2, Item no A.1.1. The Tender Conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		SCDLYT1- 00605	communication and database servers are redundant, however as per the BoQ, the communication and database servers required is standalone type.		
551.	Vol-VI: Tender Drawings	Tender Drawings - TYPICAL ARRANGEM ENT FOR VIADUCT LIGHTING - i202-BIG- TRP-00- DWG- MISINS1- 00703		As per referred drawing, we understand that Viaduct LED light fixture shall be fixed on handrail. In this regard, we understand that fixing arrangement on handrail shall be provided by viaduct contractor. Please confirm. If fixing arrangement is under this contract, please add a separate line item in the price schedule for the same.	There are no provision for handrail. Viaduct light fixture as well as supporting structure or fixing arrangement shall be in scope of the Power Supply & Traction Contractor and the cost for the same is deemed to be included in the price bid. The Tender Conditions shall prevail.
552.	Vol-VI: Tender Drawings	Tender Drawings - TYPICAL ARRANGEM ENT FOR VIADUCT	Note: Power Socket on Viaduct at 50m intervals (optional) at staggered manner on both UP and DN side	a) We understand that power socket on viaduct are not covered under this contract, as it is mentioned "Optional" in the referred specification clause. If required, please furnish the technical specification for the same and add	Its optional and the contractor can submit details to the Engineer for approval during construction stage and will be paid through provisional sum. The Tender Conditions shall



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
		LIGHTING - i202-BIG- TRP-00- DWG- MISINS1- 00703		separate line item in the price schedule. b) We understand that power sockets shall be provided at every 100m in both up & down tracks. In Staggered fashion the distance between two adjacent sockets will be 50m. Please confirm.	prevail.
553.	Vol-VI: Tender Drawings	Tender Drawings	General	Please provide the following drawings 1) Depot Cable layout drawings, 2) Sectioning drawings with chainage mentioned	1) Depot cable layout drawing is the part of CSD drawing to be finalised by the contractor after proper interfacing with depot contractor and track contractor. The Engineer will coordinate. 2) Sectioning diagram for Main line as well as depot shown is indicative only. However, these drawing will be finalised by the contractor after proper interfacing with relevant contractors.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
					The Tender Conditions shall prevail.
554.	VOL-VII- Pricing Document	Sub Clause - 1.4 Page (4/113)	Table 1: Items under Price Variation	Price variation clause is applicable only for Power Transformers, 33kV Cable, 33kV Switchgear, DC Cable, Structure earth conductor and Battery charger. Since, scope include a large proportion of DC switchgear, Auxiliary and Rectifier transformer and LV cable too, and risk/opportunities associated with metal fluctuations will affect submission of overall competitiveness of the bid. Thus, request to please include the Price variation for; • DC Switchgear • Auxiliary transformer • Rectifier Transformer Price variation formula can be proposed by contractor mutually agreed by employer.	PV only applicable to those items which are given in referred clause. IEEMA formulae not available for the items referred by bidders. The Tender condition shall prevail



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
555.	VOL-VII- Pricing Document	Sub Clause - 1.4.2 & 1.4.3 Page (4/113)	Clause 1.4: Price Variation 1.4.2 For items manufactured in India and quoted in Indian rupees in the tender the price variation shall be subject to price variation as per relevant IEEMA formula, given in Annexure-B at the end of this Volume and prescribed in PC Clause No 13.7 of Volume-II. 1.4.3 The price variation shall be payable on the basis of relevant IEEMA formulas (website www.ieema.org) for items in above table. 1.4.4 For items manufactured offshore (outside India) and quoted in foreign currency (USD, EURO) the price variation will be governed by the formula given below. For "Conductor Rail" [BOQ Bill No. IN-6.1– Item No. A.1], the price adjustment shall be linked to spot rate of aluminium quoted at London Metal Exchange (LME), and shall be as under:	As per the clause, PV is applicable as per IEEMA or LME. This shall lead to non-compensation of escalation in installation related items like workmen wages, fuel etc. with respect to actual market price escalation. In our experience, the services scope of works which are predominantly labour oriented are the most affected due to change in market indices. For instance, the minimum wages have increased significantly over past few years throughout the country. In absence of any compensation mechanism against such cost escalation, the bidders may have to factor in contingencies which shall lead to speculations. Therefore, we kindly request you to allow the price variation clause for all the schedules with suitable weightages in line with the nature of works.	Refer PC clause 13.7 in Vol- II. PV is applicable for supply portion and erection portion as well. Tender conditions shall prevail.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
556.	VOL-VII- Pricing Document	Sub Clause - 1.4.4 Page (5/113)	Clause 1.4: Price Variation 1.4.4 For items manufactured offshore (outside India) and quoted in foreign currency (USD, EURO) the price variation will be governed by the formula given below. For "Conductor Rail" [BOQ Bill No. IN-6.1– Item No. A.1], the price adjustment shall be linked to spot rate of aluminium quoted at London Metal Exchange (LME), and shall be as under: Price Adjustment = 0.75 x Accepted Price x [Current Index – Base Index] x f Base Index Where; Current Index is the spot rate cost of aluminium as given on the L.M.E. (London Metal Exchange) 28 (twenty- eight) days prior to the date of notification to Engineer / Employer for inspection of material; Base Index is the cost of aluminium as given by the L.M.E. (London Metal Exchange) 28 (twenty-eight) days prior	The provided formula is floating the conductor rail price using the spot rate of aluminium quoted at London Metal Exchange (LME) which is correct. But the spot rate of aluminium in reality only impacts the mass of aluminium that is used to produce the rail. The formula considers that 75% of the rail price is variable following the aluminium spot rate and do not consider that the spot rate will only impact the costs of the mass of aluminium used for the production of the rail and this part of costs compared to the overall costs of the rail is much lower than 75% of the rail price. The more appropriate LME adjustment for the conductor rail is to apply the variation in LME only on the real mass of aluminium used for the production of the rail and not on the other costs factors that belong to the production of the rail. Therefore, we	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			to the latest date of Tender submission; f = Zo / Z1 Zo is the number of units of the currency of the index which is equivalent to one unit of bid currency as applicable on 28 (twenty-eight) days prior to the latest date of Tender submission; and Z1 is the number of units of the currency of the index which is equivalent to one unit of bid currency as applicable on 28 (twenty-eight) days prior to the date of notification for inspection. Note: The exchange rates to be employed for such conversion shall be the TT selling rate of State Bank of India at the close of business of the State Bank of India on the respective date.	request you to change the price variation accordingly: Price Variation for Conductor Rail The price adjustment shall be linked to spot rate of aluminium quoted at London Metal Exchange (LME), and shall be as under: P1= P0 + M x (LME1 – LME0) M= Mass of aluminium per meter of conductor rail P0= Base price (Contract price) of the Conductor rail (EUR per meter) P1= Calculated new price of the Conductor Rail based on the new LME (EUR per meter) LME0= LME rate (EUR/tonne) 28 days prior to tender submission date LME1 = LME rate (EUR/tonne) 28 days prior to notification for inspection Therefore, we request you to kindly consider and change formula	



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				accordingly.	
557.	VOL-VII- Pricing Document	Sub Clause 1.4.8, Page (6 / 113)	1.4.8 The total admissible price variation amount for this Contract shall be subject to a ceiling of ± 5 % (five percent) of the Contract Price.	The duration of contract is 1278 days and this package is having major supply portion with the major composition of commodities like Copper, Steel, Aluminium and Zinc. Considering longer duration tender and market fluctuations trend in recent years on the commodities, the ceiling of + or - 5% will have major limitation and the same will impact during execution of the contract. We request Employer to consider the ceiling of + or - 25% of the contract value. Same practice followed in other metro tenders also.	Corrigendum is being issued separately.
558.	VOL-VII- Pricing Document	Sub Clause - 1.11.7 Page (11/113)	Clause 1.11: Measurement & Payment Compensation for items covered in Clause 1.11.6 above & Bill No. IN-10, shall include for all costs incurred in	As per contract conditions, the contractor is not expected to submit Safe Custody Guarantee. In view of the above, it is requested to modify the clause as	Corrigendum is being issued separately



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			procurement/manufacture, factory testing, inspection, shipping, hauling, off-loading, storing at site in Indore. Payment will be made for the items delivered and stored in a place and manner approved by the Engineer. Payment shall be made on the basis of 80% of the supply price quoted in the bid on delivery to the Contractor's respective storage place in Indore and balance 20% of the supply price after installation, testing, and commissioning in the depot and/or on the section as certified by the Engineer. Payment on delivery will be made against the submission of following documents: a. Certificate of type tests; b. Certification of Factory Acceptance Tests; c. Certificate of inspection by the Engineer; d. Provision of Safe Custody Bank Guarantee; e. Proof of insurance; and f. Technical	under: Compensation for items covered in Clause 1.11.6 above & Bill No. IN-10, shall include for all costs incurred in procurement/manufacture, factory testing, inspection, shipping, hauling, off-loading, storing at site in Indore. Payment will be made for the items delivered and stored in a place and manner approved by the Engineer. Payment shall be made on the basis of 80% of the supply price quoted in the bid on delivery to the Contractor's respective storage place in Indore and balance 20% of the supply price after installation, testing, and commissioning in the depot and/or on the section as certified by the Engineer. Payment on delivery will be made against the submission of following documents: a. Certificate of type tests; b. Certification of Factory Acceptance Tests;	



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			literature and equipment manual. g. Packing list	c. Certificate of inspection by the Engineer; d. Provision of Safe Custody Bank Guarantee; e. Proof of insurance; and f. Technical literature and equipment manual. g. Packing list	
559.	VOL-VII- Pricing Document	Sub Clause - 1.11.7 Page (11/113)	Clause 1.11: Measurement & Payment, Compensation for items covered in Clause 1.11.6 above & Bill No. IN-10, shall include forfollowing documents a. Certificate of type tests; b. Certification of Factory Acceptance Tests; c. Certificate of inspection by the Engineer; d. Provision of Safe Custody Bank Guarantee; e. Proof of insurance; and f. Technical literature and equipment manual. g. Packing list	Kindly confirm the safe custody Bank guarantee requirement for the contract. If applicable, kindly confirm value and validity period along with format.	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
560.	VOL-VII- Pricing Document	Sub Clause - 1.11.7 Page (11/113)	Clause 1.11: Measurement & Payment, Compensation for items covered in Clause 1.11.6 above & Bill No. IN-10, shall include for all costs incurred in procurement/manufacture, factory testing, inspection, shipping, hauling, off-loading, storing at site in Indore. Payment will be made for the items delivered and stored in a place and manner approved by the Engineer. Payment shall be made on the basis of 80% of the supply price quoted in the bid on delivery to the Contractor's respective storage place in Indore and balance 20% of the supply price after installation, testing, and commissioning in the depot and/or on the section as certified by the Engineer. Payment on delivery will be made against the submission of following documents: a. Certificate of type tests; b. Certification of Factory Acceptance Tests; c. Certificate of inspection by the	Bidder understanding Safe Custody Bank Guarantee is not applicable in this Package IN-09. Please confirm	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			Engineer; d. Provision of Safe Custody Bank Guarantee;		
561.	VOL-VII- Pricing Document (BOQ_1026 64)	Sub clause 2.2.1, Page (15/113)	Price schedule Bill no: IN-1.2 & 1.3	Since the length of 132kV cable required Incomer and Outgoing feeders to Power Transformers will be very less, it would be difficult for bidder to purchase this small quantity and hence bidder understands that Supply, installation, Termination, testing and commissioning of all 132kV Cabling inside RSS i.e. Incomer and Outgoing feeders to Power Transformers will be done by MPPTCL Subcontractor. Please confirm our understanding. Also, there is no line item for 132kV cable in the referred Bills.	All works relating to 132 KV cable including connection to Transformer is covered under PSA (MPPTCL) scope except the works mentioned in interface matrix with PSA. The decision of Engineer shall be final. The Tender Conditions shall prevail.
562.	VOL-VII- Pricing Document (BOQ_1026 64)	Sub Clause 2.2.2, Page (17 /113)	A.1.4 - Supply and erection including testing and commissioning Steel structure & Busbars A.1.4.1 - Structures - 5.0 MT	In referred cl. Structural steel qty 5.0 MT is given, we presume that same is for equipment supporting structure for Gandhinagar RSS. Please confirm.	Structural steel qty 5.0 MT is for equipment supporting structure for Gandhinagar RSS.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				Also in price schedule for other two RSS structural steel qty. not included Please add Item for the structural steel qty in the price schedule.	In price schedule for other two RSS's (GIS), structural steel qty is meagre, the same line item shall be operated. The Tender Conditions shall prevail.
563.	VOL-VII- Pricing Document	Sub Clause 2.3.2 Page (26 / 113)	Item No. A.2.1, Supply: o 33KV Cable as per specification in the 33 KV ring circuit among various ASS /TSS o 33 KV Cable ring inside the depots for feeding depot ASS & TSS o 33 KV interconnecting Cables at Pul Bogda	We understand that the 33 KV interconnecting Cables at Pul Bogda is not in the scope of this tender. Please confirm.	Corrigendum is being issued separately.
564.	VOL-VII- Pricing Document	Sub Clause 2.3.2 Page (26 / 113)	Item No. A.2.1,: RSS To ASS/TSS Feeder	Request you to provide the distance between RSS and ASS/TSS o Gandhi Nagar Dept RSS to Gandhi Nagar Depot ASS/TSS o ISBT/MR-10 Nagar RSS to ISBT/MR-10 ASS/TSS Khajrana Square RSS to Khajrana ASS/TSS	The bidder is advised to visit site, carry out survey for the said section to evaluate actual site conditions and route length requirements. The Tender Conditions shall



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
					prevail.
565.	VOL-VII- Pricing Document	Sub Clause 2.3.2 Page (27 / 113)	Item No. A.3.1, Supply, laying, termination, testing and commissioning of 33 kV Cables and connections. Ring main between ASS and TSS station for elevated/underground: 33 KV interconnecting Cables at Pul Bogda for feeding ASS/TSS of other corridor	Kindly specify where the present corridor is connected to Pul Bogda for feeding ASS/TSS of other corridor.	Corrigendum is being issued separately.
566.	VOL-VII- Pricing Document	Sub Clause 2.3.2 Page (25 to 27 / 113)	Item No. A.1, A.2 & A.3 33kV cables	We understand that 1km of 33kV cable means 1km of 1run x 1Cx240 Sq.mm copper cable. Please confirm.	1 Km of 33KV cable means 1 Km of 3 Runs of 1CX240 Sq mm cable with all accessories like termination kits, glands and lugs and supporting brackets wherever necessary. Refer Clause no. 2 Explanatory Notes To Bill Of Quantities, sub Clause 2.3.2 - 33kV Cables.



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					The Tender Conditions shall prevail.
567.	VOL-VII- Pricing Document	Sub Clause 2.3.2 Page (25 to 27 / 113)	Item No. A.1, A.2 & A.3 Pilot wire differential OFC Cable	As per clause no. 14.2.4.11.9 Pilot wire relay protection (OFC cables) with necessary CT's will be provided for all 33kV cable links between ASS within a station or between two ASS of adjacent stations for cables laid on viaduct sections and from RSS to ASS. However, there is no line item in the Bid price schedule for OFC cable. Please check and include the same in price schedule.	Refer Clause no. 2 Explanatory Notes To Bill Of Quantities, sub Clause 2.3.2 - 33kV Cables. The price of Control cable for protection is deemed to be included in 33kV cables price. The tender conditions shall prevail
568.	VOL-VII- Pricing Document	Sub Clause 2.3.2 Page (25 to 27 / 113)	Item No. A.1, A.2 & A.3 Pilot wire differential OFC Cable	Kindly furnish the detailed specification for OFC cable as the same is not available as part of tender documents.	Corrigendum is being issued separately.
569.	VOL-VII- Pricing Document	Sub Clause No. 2.4.1, (Page 29 to 32 / 113)	Item No. A.1.1 to A.1.6 CB withdrawal Trolley two numbers	As per referred clause, each 33kV switchboard shall be provided with two number of CB withdrawal Trolley. In this regard, we propose only one	Corrigendum is being issued separately.



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
				number of CB withdrawal Trolley for each elevated station and two number for UG station (1 nos. for each ASS-1 & ASS-2). Please accept the same.	
570.	VOL-VII- Pricing Document	Sub Clause No. 2.4.1, (Page 29 to 32 of 113)	Item No. A.1.1 to A.1.6 No. of 33kV feeders at ASS station Tender drawings - 33kV Power supply SLD for Indore metro yellow line - I202- BIG-TRP-00-DWG- ATSSLD1-00103 Typical SLD for Auxiliary substation Type-A, Type-B, Type-C, Type-D, Type-E, Type-F, Type-I & Type- J - 202- BIG-TRP-00-DWG-ASSSLD1- 00301/303/305/307/309/311/317/319 Typical protection SLD for Auxiliary substation Type- A, Type-B, Type-C, Type-D, Type-E, Type-F, Type-I & Type-J Vol.4, chapter-14, clause no. 14.1.3	There are discrepancies in the number of 33kV bays at various stations among the referred drawings/specification clauses. In this regard, we understand that number of 33kV panel at each station shall be provided as per "Typical SLD for Auxiliary substation Type-A, Type-B, Type-C, Type-D, Type-E, Type-F, Type-I & Type-J - 202-BIG-TRP-00-DWG- ASSSLD1-00301/303/305/307/309/311/317/319 " . Please confirm.	Corrigendum is being issued separately.



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571.	VOL-VII- Pricing Document	Sub Clause 2.6.2, , Page (47 / 113)	Item A.3.4 BOQ Item description: Supply and erection including testing and commissioning of one panel board HSCB feeders for 750V DC busbar in Inverter Ckt. BOQ Explanation: Supply: 1 panel, 1 pole 900 V DC switchboard consisting of two DC load break switches and Motorized isolator suitable for 750 V DC supply along with mounting insulators	In BOQ item description it is mentioned for the supply for 1 panel board HSCB feeder for Inverter circuit, where as in BOQ explanation it is mentioned for the switchboard consisting of two DC load break switches and Motorized isolator. Hence it is contradicting requirement. So, we request you to clarify the requirement	1 panel board set is the one complete assembly required as described in BoQ explanatory notes. Refer Explanation TSS Bill no. IN-5.1 item no. A.3.4. The Tender Conditions shall prevail.
572.	VOL-VII- Pricing Document	Sub Clause No. 2.9.2, , Page (75 / 113)	Item No. A.5 & B.4 Page (87 / 113) - Equipment room furniture at OCC & BCC SI No. 16 - Furniture's for TPC's operating works stations in OCC/BCC's operation	As per referred price schedule, furniture at OCC & BCC shall be provided by Traction and Power Supply Contractor. However, as per referred interface, Signalling and Train Control Contractor shall provide furniture at OCC & BCC. Please check and clarify.	Furniture at OCC & BCC shall be provided by Signalling and Train Control (S&T) Contractor. However, furniture for traction power controller in OCC, BCC and SCADA server room shall be provided by Traction and Power Supply Contractor matching with the furniture



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			Traction and Power Supply Contractor - Furniture's requirements to be provided to signalling and Train control contractor Volume-4, chapter-3, Interface, clause no. 3.2.8 Interface With Signalling and Train Control Contractor: Signalling and Train Control Contractor shall include the furniture requirements in their planning of OCC/BCC, layout plan and provide the same accordingly.		provided by S&T Contractor in quality and aesthetic. The Tender Conditions shall prevail.
573.	VOL-VII- Pricing Document	Sub clause 2.9.2, Page (66/113)	As per the SCADA architecture, the communication and database servers are redundant, however as per the BoQ, the communication and database servers required is standalone type.	Kindly clarify the requirement	To provide redundancy, hot stand by servers is considered at OCC and BCC for communication and database servers. The Tender Conditions shall prevail.
574.	VOL-VII- Pricing Document	Sub Clause 2.10.2, Page (108/113)	Item F.1 Spares The price under this item shall include the cost of supplying spare parts, as	Different requirements are mentioned in the referred clauses. Please confirm that cost of supplying spare	There are three stages of supplying spares which is clearly mentioned in Chapter-



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			listed in the Chapter 9 of TS Vol-IV of Work's Requirements for Stage-1. o If however the Tenderer feels that some more items or more quantities are required for the proper operation and maintenance of the installations supplied and erected by him, for a period of at least 5 years commencing from the expiry of the defect liability period, the Tenderer shall in that case include such items and quantities in his bid and quote them in this very item. All conductor supplied as spare shall be in robust steel drums.	parts shall include spares as listed in the Chapter 9 of TS Vol-IV of Work's Requirements for Stage-1 only.	9 of Vol-IV and in BoQ bill No. 9.1 item no.F.1.1, F.1.1.2 and F.1.1.3 of Vol-VII Pricing document. The Tender Conditions shall prevail.
575.	VOL-VII- Pricing Document	Sub Clause 2.11.2, Page (110 / 113)	Sub Clause 2.11 (Civil and Building Works including Electrifications Works for RSS & TSS): item 10.2 & 10.2 (b),	Bidder presumes that being BOQ rate contract, the new line items & BOQ quantity related to piling or improve or strengthen the soil to bear load will be operated as per actuals. Pls confirm our understanding.	Based on GT investigation done by the Power Supply & Traction Contractor, the structural drawing shall be developed and submitted to the Engineer for review and approval prior to construction. Any new items will be operated under provisional



Sr. No.	Tender Document Reference	Clause/Sub- Clause/Para (Page No)	Tender Document Excerpt/ Title/ Particulars of Tender Document	Description of Query Raised by Tenderer	Clarification
			Bill No. Bem detail Description of work 10.2.6 Shuctural Works RSS Design, Supply& construction work in all respect related to the following as per specification and drawings – Earth Work - Excession & Backfilling Concrete Work (Plan & Reinforced) Reinforcement Work Water Proofing Work Macellaneous Works Pile Works Road Works Road Work Road Works Road Work Road Works Road Work Road Works Road Work Road Work Road Work Road Wor		sum at rates approved by the Engineer as per prevailing market conditions.
576.	VOL-VII- Pricing Document (BOQ_1026 64)	Sub Clause 2.9.2, Item G, Page (103/113)	: Design, supply, installation, testing and commissioning of communication equipment's (Ethernet switches, Patch cable, Lan cable, routers, firewall for secure wireless communication if required) / servers/ gateway/ workstations/ required for control and monitoring.	We understand that as per the BoQ, item G is components required for wireless connectivity with SLDC. Also, as per our understanding, network connectivity for the same shall be provided by MPMRCL as same item is not included in BoQ.	The wireless connectivity with SLDC is not required. The Tender Conditions shall prevail.
577.	VOL-VII- Pricing Document (BOQ_1026 64)	Bill No. IN- 10.1 to 10.5 Receiving Substation for Gandhinagar RSS- Indore Metro - SCHEDULE	Bill no. no IN -10.1 - Architectural work for RSS Bill no. no IN -10.1(a) - Architectural work for GIS (2nos) Bill no. no IN -10.2 - Structural work for RSS Bill no. no IN -10.2(a) - Structural work for GIS building (2nos) Bill no. no IN -10.3 - Switchyard civil work for RSS Bill no. no IN -10.4 - Transformer &	In price schedule Architectural work for qty. given in schedule no 10.1 & 10.1(a) and Structural works is given in schedule no 10.2 & 10.2 (a), switch yard RSS for civil work is given in 10.3 and Transformer and baffle wall civil work for RSS is given in 10.4, PHE works for RSS is given in 10.5	The Tender Conditions shall prevail.



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		OF RATES AND PRICES, Page (40 to 89 /110)	Baffle wall civil work for RSS Bill no. no IN -10.5 - PHE work for RSS	we presume that the Architectural works for Gandhinagar schedule refer to 10.1, for other RSS referring 10.1 (a). for structural work for Gandhinagar schedule refer to 10.2, for other RSS referring 10.2 (a). for all 3 RSS Switchyard RSS civil works, Transformer & baffle wall and PHE works referring 10.3, 10.4 and 10.5 respectively.	
578.	VOL-VII- Pricing Document (BOQ_1026 64	Receiving Substation for	Bill no. no IN -10.1 - Architectural work for RSS Bill no. no IN -10.1(a) - Architectural work for GIS (2nos) Bill no. no IN -10.2 - Structural work for RSS Bill no. no IN -10.2(a) - Structural work for GIS building (2nos) Bill no. no IN -10.3 - Switchyard civil work for RSS Bill no. no IN -10.4 - Transformer & Baffle wall civil work for RSS Bill no. no IN -10.5 - PHE work for RSS	We trust that, if any additional civil item is required in addition to Price schedule item, the same shall be payable as additional item with mutually agreed rate by M/s MPMRCL for all RSS. Please confirm.	There is a Provisional sum in Vol-VII Pricing document to meet the requirement of unforeseen items. The Engineer decision shall be final. The tender condition shall prevail.



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		89 /110)			
579.	Pricing Document (BOQ_1026	Bill no. IN- 10.3 - Switchyard civil works for RSS, Page (66 /110)	Part -I (Switch yard - Foundation Works) Section "F": Chain link fence & Gate 1. Supply and erection of Fencing Panels, Uprights, Gate and Anticlimbing device	Please provide the detailed specification of chain link fence of post c/c distance, height of fence along with details fence drawing to estimate the civil quantities.	Corrigendum is being issued separately.
580.	VOL-VII- Pricing Document	General	Discount Provision	Bidder could not find any provision to offer discount in the price schedule BOQ. Bidder requests MPMRCL to add a provision of discount in the BOQ_102664 (Summary Sheet) to allow Bidder to provide discount, if required, because of time constraints for the tender submission.	The Bidder shall submit the final discounted rate in respective item. The Tender Conditions shall prevail.
581.		General		Kindly Indicate the size and specification for Fibre optic (FO) cables and pilot wire protection.	Corrigendum is being issued separately.
582.		General		We understand that storage space shall be provided by employer.	The Tender Conditions shall prevail.



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				Please confirm.	
583.		General	Discount Provision	Bidder could not find any provision to offer discount in the price schedule BOQ. Bidder requests MPMRCL to add a provision of discount in the BOQ_102664 (Summary Sheet) to allow Bidder to provide discount, if required, because of time constraints for the tender submission.	Bidder shall submit the final discounted rate in respective item. The Tender Conditions shall prevail.
584.		General		Kindly confirm Whether High Sea sales shall be accepted for this project	The Tender Conditions shall prevail.
585.		General		We understand that we can procure the stamp papers for the documents (BG, Contract agreement, Indemnity bond) to be submitted to you, from any state and it is not mandatory to procure the same from MP. Kindly confirm our understanding.	Since the agreement is to be registered in MP, We should procure the stamp paper from MP. The Tender Conditions shall prevail.
586.	General- Site Visit	General		We request you to provide Soil Report and Contour details of RSS	This is within the scope of the Power Supply & Traction



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	Points			locations for the detailed design.	Contractor. The Tender Conditions shall prevail.
587.	General- Site Visit Points	General		We presume that encumbrance free land for all the RSS Station shall be handed over to bidder before commencement of the project. Kindly Confirm	Corrigendum is being issued separately.
588.	General	General	Extension in Bid Submission date	Since some of the equipments are to be procured only from Europe and there will be Christmas and New year holidays from Dec 21 end to 1st week of Jan 22. Therefore, vendors will not be able to provide offers in the given timeline as actual offer preparation will begin after pre bid clarifications and addendum. In view of above, kindly provide extension of at least 5-6 weeks.	Corrigendum-01 issued separately.



Managing Director Madhya Pradesh Metro Rail Corporation Limited Bhopal