

**DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED**

(A Government of India Enterprise)

**Procurement of Design, Supply, Construction, Installation, Testing and Commissioning of 2x25kv AC Electrification, Signalling & Telecommunication, E&M and Associated Works on Design-Build Lump Sum Basis of Khurja-Pilkhani Section (Approximately 220 Route Km of Single Line) of Eastern Dedicated Freight Corridor Systems Works Contract Package 305**

ICB No.: HQ/SYS/EC/D-B/Khurja – Pilkhani

<b>S. N.</b>	<b>Ref. to Bid Documents</b>	<b>Brief Description of Clause / Para No.</b>	<b>Query Raised</b>	<b>Employer's Response</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>
1	Clause 8.14.4 -2 PS Part II Vol II	Setting distance of fixed structures shall not be less than that specified in SSOD for EDFC. This shall be however, subject to review by the Engineer. The location of traction masts shall be such that visibility of signals is not obstructed and shall be as indicated in ACTM. The OHE supporting masts/portals/drop arms shall be coordinated with signal locations to ensure clear signal visibility.	Can we design all the OHE masts (single cantilever/multiple cantilever/Portals/TTC/Structures) with a standard implantation of 3.00m as the SSOD of EDFC permits only 2.825m implantation for structures? The implantation of structures in the visibility of signals will be designed such that the visibility of signals is not obstructed and will be according to ACTM.	The provisions in the Bidding Document are self-explanatory and shall prevail.
2	Clause 8.14.1 PS Part II Vol II	Overhead equipment structures for the main line tracks shall be mechanically and electrically independent except where specifically approved by the Engineer. In station yards, having three or more tracks, generally, portals shall be erected as per yard plan.	Can we use masts in between yard tracks, mainline tracks & loop line if the track centre is adequate to install mast with an offset of 2.825+curve allowance if any, as per standard schedule of dimensions for EDFC.	The provisions in the Bidding Document are self-explanatory and shall prevail.
3	Clause 8.16 PS Part II Vol II	The zinc coating for steel structures and parts shall be as per RDSO Specification no.ETI/OHE/13 (4/84). The Zinc coating specified in the equipment specification, if any, will also be considered and most stringent Zinc coating out of the two will be applicable as approved by the Engineer. The polluted areas shall be identified as a result of pollution mapping by the contractor and approved by the Engineer, where the zinc coating shall be 1000 gm/ m2. In case of need to use nonstandard SPS at special locations to be fixed to the steel structure, these shall be with clamps to avoid drilling of galvanized mast sections.	This Clause shall be applicable for only steel structures and small parts of steel attachments on mast and not for OHE components. For OHE components, the Galvanisation for OHE components shall be in accordance with RDSO Specification ETI/OHE/13 or European Standard EN ISO 1461 where galvanisation zinc coating of lesser mass is allowed depending upon the thickness	The Provisions of the bidding document shall prevail.
4	Clause 8.18.1 d PS Part II Vol II	Porcelain insulators as per RDSO specification No. TI/SPC/(OHE)/INS/0070 shall be provided at all locations except at polluted locations and LC Gates where insulators as per RDSO Specification TI/SPC/OHE/INSCOM/0070(04/07) shall be used. The locations where polluted zone type of insulators is to be installed shall be proposed after survey and shall be installed with the approval of Engineer.	Can we install composite insulators as per RDSO specification TI/SPC/OHE/INSCOM/0070 (04/07) or as per any other International standards with Aluminium tube cantilevers as the Porcelain insulators will not be suitable for aluminium cantilevers.	The Provisions of the bidding document shall prevail.  Please refer S.N. 16 of Addendum No. 08.
5	Part 4		It is requested to provide CAD version of all alignment and schematic drawings.	Request not accepted.

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(1)	(2)	(3)	(4)	(5)
6	Part 4		Please provide the details of ROB, FOB, transmission lines and cross feeders of Indian railways with spanning over DFC line and angle of crossing, height etc. to estimate design work effectively.	Refer Alignment Plans in Part-4, Reference Document
7	PS Vol2 Electrification clause 6.1.3 (3.c)	Metering Bays with check meters, Metering CT, PT and the associated insulation, protection and monitoring arrangement, as per utility's specifications (Power Supply Authority as case may be) with required communication ports, on the 132kV Incoming side in a separate cubicle at each TSS, which should have communication with OCC through SCADA.	We presume that CT & PT for check metering purpose is in the scope of Bidder. Please confirm our understanding.  Please specify Scope and location of main metering.	The Provisions of the bidding document shall prevail.  Please refer clause 6.1.3 (3) of PS/Electrical Vol 2 of the Bid Documents. Only check metering is required at TSS. The main metering is not in the scope of the Bidder.
8	PS Vol2 Electrification 10.6.1 page 525 of 1271	Table 10.1.1: Indicative List of Equipment to be monitored and controlled at Remote locations.  Lightning arrestor	We will provide Lightning arrestors with potential free contacts. With the potential free contacts, number of surges that are being discharged to ground can be counted & monitored through SCADA algorithm. Please confirm our understanding	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor. The Provisions of the Bidding Document shall prevail
9		Input Requirement for Traction Simulation	Please confirm if any Pocket Track is available (i.e. parallel tracks for Train crossing) in between the stations so that we can utilize these for the Train crossings on the single track. If yes, please provide the start and end chainages of pocket tracks.	Query is not relevant to "input requirement for Traction Simulation"  Please refer item No. 6 of S.N. 2 of Addendum No. 08 dated 26.10.2018.
10	PS Vol2 Electrification 5.2. Page 465 of 1271	Rolling Stock Characteristics and Train Operation Data	Please provide the Rolling Stock Harmonic Spectrum Data else confirm to use the data from Madhepura Rolling Stock.	Please refer table 18.4.2 (3), Vol.2, Part-2 of the bidding document. The Provisions of the bidding document shall prevail.
11	PS Vol2 Electrification 6.3 (4) Page 474 of 1271	In all traction power supply posts, MS Rods, GI Flats and pipes allowing adequate margin against corrosion shall be used as per EN 50522/IS 3043	We presume that Corrosion factor (where ever applicable) will be considered as per IS - 3043. Please confirm our understanding.	The Provisions of the bidding document shall prevail.
12	PS Vol2 Electrification 2.3 page 436 of 1271	The civil structure and Track work has been planned to be assigned to other contractor through Contract CP 303	Please provide electrical details of Track (like resistance etc.) to be laid. So that these details will be useful in simulation studies.	This is an interface item. Please refer clause no. 18.4.1 and Table no. 18.4.1 of PS/Electrical of Volume 2 of the bidding document.

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13	PS Vol2 Electrification 6.1.3 (3.x) Page 470 of 1271	Fault Locator	Fault location is in build features of distance protection relay, hence no separate fault locator will be provided. Please confirm our understanding.	The Provisions of the bidding document shall prevail.
14	PS Vol2 Electrification 6.1.4 (11) Page 471 of 1271	Fault Locator	Fault location is in build features of distance protection relay, hence no separate fault locator will be provided. Please confirm our understanding.	The Provisions of the bidding document shall prevail.
15	PS Vol2 Electrification 6.1.5 (11)Page 471 of 1271	Fault Locator	Fault location is in build features of distance protection relay, hence no separate fault locator will be provided. Please confirm our understanding.	The Provisions of the bidding document shall prevail.
16		Basic Insulation level of 25kV Switching Equipments (CB, ISO, CT & PT)	We presume the BIL level mentioned for Transformer is not applicable for Switching station equipments. Switching station equipments will be as per clause no. 5.10, Table 2 IEC 60071-1 for 52kV Voltage class. Please confirm our understanding.	BIL for Switching station equipments shall be as per the provisions of Clause no. 6.2.9 and 6.6 of Part 2, Section VI, Volume2 the bidding document. The Provisions of the Bidding Document shall prevail.
17	PS Elec Vol2 Clause 4.4.2 (5.a) Page 454 of 1271	Three years satisfactory performance on AC Traction system from one month prior to date of second stage of bid opening or later. (For circuit breaker and interrupters above 25kV, 25kV feeder wire, AEW, BEC and SCADA system, Three (3) years satisfactory performance on Power utilities shall also be permitted.)	We presume that this condition is applicable for all other equipment's like 132kV CT, PT, Isolators, LA & Post Insulators as well. Please confirm our understanding.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.  The Provisions of the Bidding Document shall prevail.
18	PS Elec Vol2 Clause 3.2	Design By Computer Simulation	For executing Tender simulation i.e. for finalising the ratings of Traction Transformer & Auto Transformer we require the following data for simulation: 1. Low Speed Sections. (If any) 2. Time Table (Considering the Train configurations) 3. Traction effort and Braking effort characteristics 4. Traction current and braking current characteristics 5. Rolling stock Current Limitation characteristics (If any) 6. Rail Resistance data. 7. Rolling Stock acceleration/deceleration factor details.	The available details have been given in Part-4, Reference documents. For simulation purpose Low speed section may be taken as Nil. Bidder's attention is also invited to provisions of Chapter 10, Interface Management of General Specifications, Part – 2 which specifies responsibility of the Contractor for coordination with 'Other contractors' for all his interface requirements.

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(1)	(2)	(3)	(4)	(5)
				Further, being a Design build contract, the design shall be proposed by the Contractor.
19	PS Vol2 Electrification Table 18.4.1 (7) Page 606 of 1271	<u>System Works Contractor (CP305)</u> Shall coordinate with the civil contractor so that the BEC is installed while the formation work is in progress by the civil contractor and formation is not required to be excavated for laying of BEC	By the time CP 305 contractor mobilised for execution of E&B works, Most of the alignment will be constructed already. In that case, we presume that contractor has to excavate again for laying the BEC and DFCCIL/ Civil Package Contractor will provide hindrance free access. Please confirm our understanding. On other scenario, when alignment is under progress by Civil contractor, CP-305 contractor has to lay the BEC along with civil contractor (as mentioned in the BID). DFCC has to assure how the hindrance free land will be provided. ? Please clarify.	The Provisions of the bidding document shall prevail.  Location of BEC will be proposed by designated system Contractor taking in to account the design simulation and site conditions, which shall be approved by the Engineer. Interfacing shall be the responsibility of the System Contractor during execution.
20	<b>MAIN TRACTION TRANSFORMER TYPE OF CONNECTION</b>  PS Vol2 Electrification, Chapter-7, Table 7.3.1 page 488 of 1271	....In case, the contractor proposes any other connection type transformer arrangement meeting performance requirement, the specification for such proposed transformer shall be prepared by the contractor on the lines of specification of Scott connected transformer matching/ exceeding performance parameter creation without any limitation during the service life on the life cycle cost basis and submitted for approval of the engineer, whose decision shall be final and binding to the contractor.	Since this is a Design and Built Contract, everyone should be entitled to offer their own design & Transformer connection as long as Employer Requirements and Specifications are met. It is not appropriate to compare one design with another as every design has its own pros and cons without mention of Parameters to be compared. This will lead to ambiguity as there is no tool to measure such conditions of RFP.  Beside this, we would like to state that the clause itself is discriminatory in nature as it has been mentioned that bidders considering connections other than Scott will have to prove that their design is matching or exceeding performance than Scott, however bidders offering Scott connection is not required to prove that their design is matching or exceeding other connections, thus giving unfair advantage to bidders considering Scott.  Internationally both connections are widely used and just some countries Geographical adoption only.  Also mentioning the Decision of Engineer is final & Binding to the Contractor, pushes fear to even a better Design & Solution adopted worldwide internationally.	The provisions in the Bidding Document are self-explanatory and shall prevail.

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(1)	(2)	(3)	(4)	(5)
			Thus we request you to delete this condition to provide level playing field as long as Employer requirements are met.	
21	<b>Voltage Unbalance</b>  PS Vol2 Electrification, Chapter 3, 3.2.4 (6) page 439 of 1271 6.7.2 The limit of voltage unbalance permitted according to Central Electricity Authority (CEA) standards are as follows: Page 476 of 1271	<b>Voltage imbalance and THD</b> imposed at PCC with IR's transmission line network at normal rated capacity as well as extended feed scenario in full load conditions and mitigation measures thereof, including sizing of mitigation equipment  <b>Maximum Permissible Voltage Unbalance</b> 132kv - 3%	1. Please advise relevant power supply authority for the same and specify the document/regulation to be considered to deciding PCC to avoid any issue at a later date. 2. Please advise Point of common coupling (PCC) is at Grid Substation end or TSS end. 3. Please confirm the existing short circuit level of feeding sending substation and approximate distance between sending end substation and TSS & the Type of conductor used for Transmission Line which are one of the important factors for power quality study. 4. Technically <b>Power Quality cannot be ensured without this information</b> and thus required. 5. If data is not available at this stage, data to be assumed/ considered should be specified by the employer based on available information.  How the bidder will evaluate the Voltage unbalance % at 132kv side within % Limitation for costing when the above basic information are not provided?	PCC shall be at TSS end. Please refer Table 18.4.3 of the Bid Document.  The Provisions of the Bidding Document are self-explanatory and shall prevail.
22	1. <b>AT for TSS</b> 2. <b>Spare AT of TSS Type</b>  PS Vol2 Electrification, Chapter 3, 3.3.1 (1) v (d) Page 441 of 1271 PS Vol2 Electrification 6.1.3 (3.p) Page 470 of 1271	Auto-Transformers shall be provided at each TSS (as required as per design)	1. If bidder design is with V-connected Traction Transformer scheme and simulation shows that <b><u>Auto Transformer requirement is not required in Traction Substation</u></b> then this line item will not be required. 2. Please confirm whether provision of AT in TSS is obligatory as the word "as required as per Design" is not clear and such ambiguity should not lead to dispute later. 3. Also confirm the 1 AT Spare requirement of TSS Type when Vee connected TSS does not envisage any AT.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.  The Provisions of the Bidding Document shall prevail.
23	<b>Access of Blanket &amp; Track for System Works</b>	<u>System Works Contractor (CP105)</u> Shall coordinate with the civil contractor so that the BEC is installed while the formation work is in progress by the civil contractor and formation is not required to be excavated for laying of BEC	1. Please confirm Bidder will can have access of his Plants & Machineries and Materials to the Embankment after the designed Thickness is ready (before Laying of Track) for the following works of bidder	Access of road vehicle will be permitted after blanketing. The System Contractor should ensure that there is no damage to the formation..

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	PS Vol2 Electrification, chapter 18, Table 18.4.1 (7) – Page 606 of 1271		<p>a) OCS foundation works b) Mast Erection &amp; Grouting c) Stringing of AEW, Negative Feeder d) BEC (GS Steel Flat/Rod/Conductor) e) S&amp;T Cables</p> <p>For Catenary, Contact wire Stringing, Post stringing activity Track access is a Must.</p> <p>2. Else DFCC shall confirm that Finished Blanket cannot be used for above work and only with Track Access to be used for plying Machineries, Materials for the above works.</p> <p>3. Note that the above information is very important for Sequence planning of the activity and thereby the Costing of Bid also.</p> <p>4. For example Planning Sequence &amp; Costing differs for works as below a) Only Use Track with Rail machineries for above System works. b) Using Road Machineries on Blanket also, before Laying Track for above System works &amp; Use Track also. c) Cannot use Blankets at all for Plying Road vehicles for System works</p> <p>Confirm Which of the Access above, bidder should consider for Planning Sequence &amp; Costing the Bid.</p>	<p>Access of rail vehicle will be permitted after track laying. The System Contractor shall keep close co-ordination with the Civil Contractor and PMC for interface during execution.</p> <p>The provisions in the Bidding Document are self-explanatory and shall prevail.</p>
24	<p><b>BEC Requirement &amp; Laying Sequence</b></p> <p>Tender drawing: Typical arrangement on OHE Mast on Embankment</p>	<p>1. Need of BEC (GS) 2. Location of BEC laying</p>	<p>1. Please confirm whether requirement of BEC is derived from EMI &amp; E&amp;B Simulation being Design Build Contract (or) BEC requirement is Obligatory.</p> <p>2. Since CST contract may complete the Designed Blanket confirm will the Embankment will be allowed for BEC Laying before Ballast Spreading, Track Laying <b>(or)</b> BEC to be laid after Track laying with Rail Machinery.</p> <p>3. Is the Location of Laying BEC is Fixed as shown in the Drawing or it can be changed to behind OCS Foundation.</p> <p>4. Being Design Build Contract, is Bidder permitted to provide alternative Solution to BEC Solution or Laying BEC is Obligatory or bidder can propose</p>	<p>The Provisions of the bidding document shall prevail.</p> <p>Location of BEC will be proposed by designated system Contractor taking in to account the design simulation and site conditions, which shall be approved by the Engineer. Interfacing shall be the responsibility of the System Contractor during execution. This is a design and build Contract, the System Contractor may propose alternative solution which</p>

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(1)	(2)	(3)	(4)	(5)
			suitable solution with meeting all contractual requirements. Please provide your reply for the above, to evaluate the Planning Sequence & Cost.	shall be subject to the Engineer's approval.  Further please refer Sr No. 25 of Addendum No. 8.
25	<b>Power Simulation as Single Track only</b>  PS Elec Vol2 Clause 5.2.2, Table 5.2.2 page 466 of 1271  Clause 6.1.2, Page 469 of 1271.	1. A mix of normal train and long haul train in the ratio of 2:1 shall be considered for both <b>UP and DN directions</b>  6.1.2 The typical TSS Power supply arrangement is initially planned <b>to meet power supply for single line electrification work along with earmarked spare space for those equipment will be required in future for double line electrification.</b> The design of traction installations shall be such that the future additions / alteration can be incorporated easily. The present work should be completed, in such a way that minimum modification is required for future addition /alteration.	We understand that 1. <b>BIDDER SCOPE</b> : Power Simulation & Sizing of Transformer & OCS Conductors are to be carried out for Single Track with bi- directional operation.  2. While the equipment's concerned to Future Down Track will be installed in the future and not in scope. (i.e. 25kV catenary outgoings at TSS/SP/SSP & 25kV coupling equipment's at TSS) <b>only sufficient space</b> will be provided for the same. Please Clarify both Sl.no. 1 & 2 above and Confirm Our understanding.	Equipment feeding future track electrification is not in the bidder scope, but sufficient space shall be provided while designing TSS/SSP/SP.  The provisions in the Bidding Document are self-explanatory and shall prevail.
26	<b>Pre-bid Queries &amp; Answers</b>	Pre Bid Queries & Answers are issued by DFCC and also available at Website	Please confirm the following 1. Pre-bid Answers have the status of Addendum to the RFP whether replies are added in DFCC issued Addendum or not, as those replies are considered as Clarifications to the Tender/RFP. 2. Pre-bid Queries & Answers will form Part of the Contract Agreement.	1. Response to Pre-Bid queries is for clarification only. Wherever addition or amendment to Bid document is required, is being done through amendment.  2. Pre-Bid queries and response will not form part of the contract agreement.
27	<b>Appendix 8: Clause 5.1, S. No. 19 &amp; 20 Page 646 of 1271 Clause 6.5.5 Page 649 of 1271 Clause 8.4 Page 650 of 1271 Clause 8.5 Page 651 of 1271 Clause 10.1 Page 652 of 1271 Clause 16.3.3.1 Page 661 of 1271</b>	1. Highest Voltage for Equipment Um (kV) = 60 2. Rated short duration power frequency withstand voltage (kV rms) = 115 3. Rated lightning impulse withstand voltage (kV Peak) = 280	Since the System is designed for 2 X 25 KV, the standard rated nominal voltage (Un) of 25 KV & rated insulated voltage (Unm) of 27.5kV is acceptable and available. Beside that <u>there is no Un or Umn of 30 KV and 60kV specified in EN 50124-1.</u>  Important consideration should be BIL of System voltage and 95kVrms & 250kVp is a standard BIL as per international practice.  Else no such Product in Local Suppliers Exist and such eqpt will differ from Eqpts being used in DFCC ongoing Projects.	The Provisions of the Bidding Document shall prevail.

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	<b>Clause 16.6.12</b> <b>Page 666 of 1271</b>		We request to amend the clauses as follows: 1. Highest Voltage for Equipment Um (kV) = 55 2. Rated short duration power frequency withstand voltage (kV rms) = 95 3. Rated lightning impulse withstand voltage (kV Peak) = 250 Which is international practice.	
28	<b>Clause 6.9.8 (b. Second bullet point)</b>	Bus Differential Protection.	1. We are considering one Bus bar differential protection relay for complete 132kV Bus. Please confirm our understanding. 2. In 132kV Bus, we presume that additional one set of CT to be provided in Bus Coupler Bay is required to cater Bus differential protection.	The provisions in the Bidding Document are self-explanatory and shall prevail.
29	<b>Clause 6.9.9 PS Electrical</b> <b>Page 479 of 1271</b>	Disturbance, event recording shall be built in feature and shall be included in the IED, MFM including Data Exchange with HMI and PC. The relays, IED's, MFM's shall be provided with suitable communication interface conforming to IEC 61850 standards.	MFM communication protocol can be provided with Modbus protocol. Please clarify.	The Provisions of the Bidding Document shall prevail with the latest technology.  Being a Design Build Contract, the design shall be proposed by the Contractor and approved by the Engineer at design stage after award of Contract.
30		Land Orientation	1. We presume that TSS land orientation is available in the following manner: 140 meters perpendicular to Track 85 meters Parallel to Track. 2. We Presume that SP Land Orientation is available in the following manner: 55 meters parallel to Track 30 meters perpendicular to Track 3. We presume that SSP Land Orientation is available in the following manner: 55 meters parallel to Track 25 meters perpendicular to Track. Please confirm our Assumption.	Bidder's understanding is correct. Further, the Bidder may carry out site survey.
31	Vol-5 Particular Specifications E&M and Associated Works, clause no. 3.2.3,	Structure / Fencing at Stations and Depots adjacent to main building as required for Auxiliary Power Substation (ASS) including HT/LT Transformer and D.G.Set (in addition to the Electrical Room and D.G. Room provided by CST contractor CP-303 at stations).	We understand that building will be Constructed by CST contractor CP-303. Reference drawing for Auxiliary Power Substation (ASS) is required.	Provision of 2 rooms is there for DG Set and Electrical room in CP-303 contractor scope as per drawing. However, further requirement, if any shall be



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	'Construction of Ancillary Buildings and Structures'			constructed by the designated system contractor.
32	Vol-5 Particular Specifications E&M and Associated Works, clause no. 4.2.1, 'Basic Design Criteria & Performance Specification for Non Traction Power Supply'	The single point failure in the system shall not impact the performance of the system and shall be able to meet its application duty requirements without any compromise to performance or any intervention. However, clause no. 4.2.2, 'Project Data Parameters/ Performance requirement', Sr. No. (1),(d) states that, '11 kV incoming supply upto the Auxiliary Power Sub-station shall be single circuit for station, Depot, staff quarters and associated buildings' and Sr. No. (1),(e) states that, 'Each Auxiliary Power Sub-station shall have One step down transformer of adequate capacity'.	We understand that clause for single point failure in the system is applicable beyond the 11kV incoming supply and Step-down transformer as per clause no. 4.2.2,(1)(d) & (e) as the same cannot be achieved. Please confirm the same.	Bidder understanding is correct. Redundancy shall be maintained beyond the transformer
33	Vol-5 Particular Specifications E&M and Associated Works, clause no. 3.2.5.	The Contractor after assessing the load and voltage drops for Depots and all other buildings will judiciously decide the location of Auxiliary Power Substations so as to ensure that the Voltage drop at any of the buildings is confined to 3%. A separate Auxiliary Power Substation with HT feed from the nearest ASS for those buildings shall be provided by the System Contractor at his own cost if required.	We understand that as per IEE Wiring regulations, IS & BS standards the voltage drop from supply transformer secondary upto the farthest point of installation is to be maintained within 5%. There is no other intermediate requirement of 3% as per the above mentioned standards. Please confirm that the voltage drop requirements shall have to follow as per the above mentioned design standards.	The Provisions of the Bidding Document shall prevail
34	Vol-5 Particular Specifications E&M and Associated Works, clause no. 4.6 EMPLOYER'S REQUIREMENTS - FUNCTIONAL.	Section 4.6.1 indicated the Chainage location of all Crossing Station buildings, IMD buildings and IMSD buildings but there is no mention regarding the Staff Quarter buildings.	We understand that the Staff Quarter buildings will be provided at multiple locations. Please provide the Staff Quarter buildings chainage locations for Transformer sizing and feeder sizing estimation basis accordingly.	<p>Please refer the clause 4.6.1, Part 2, Vol 5 of the Bid Document.</p> <p>For location of quarters and chainage, the system contractor will interface with the civil contractor. However, please be informed that presently the distribution of quarters among the different locations is not finalised. The location of quarters shall be furnished during execution.</p> <p>Being a design &amp; build contract, Functional Performance requirements have been specified. The detailed design is in the scope of the contractor.</p>

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35	Vol-5 Particular Specifications E&M and Associated Works, clause no. 4.6 EMPLOYER'S REQUIREMENTS - FUNCTIONAL.	<p>S. no (4) RESIDENTIAL QUARTERS FOR DFCC states as follows: 'It is proposed to construct various types of quarters by the CST contractor (CP-303). The indicative schematic plan for Type A, Type and Type C quarters shall be as per table below:</p> <table><tr><th>S. No.</th><th>Type of quarter</th><th>Reference to indicative Drawing (Appendix)/ Indicative area of the building</th><th>Number of Residential Quarters</th></tr><tr><td>1.</td><td>Type A</td><td>GC/DFCC/QTRS-701</td><td>160</td></tr><tr><td>2.</td><td>Type B</td><td>GC/DFCC/QTRS-702</td><td>29</td></tr><tr><td>3.</td><td>Type C</td><td>GC/DFCC/QTRS-703</td><td>02</td></tr></table> <p>Civil work of Residential Building is carried out by CST Contractor.</p>				S. No.	Type of quarter	Reference to indicative Drawing (Appendix)/ Indicative area of the building	Number of Residential Quarters	1.	Type A	GC/DFCC/QTRS-701	160	2.	Type B	GC/DFCC/QTRS-702	29	3.	Type C	GC/DFCC/QTRS-703	02	The table only indicates the quantity of Type-A, B & C residential quarters, however there is no mention whether the Staff Quarters are being provided at each Crossing Station & the number of buildings/blocks. This is required for entire E&M designing for internal & external works.	Please refer to response to query at serial no. 34 above
S. No.	Type of quarter	Reference to indicative Drawing (Appendix)/ Indicative area of the building	Number of Residential Quarters																				
1.	Type A	GC/DFCC/QTRS-701	160																				
2.	Type B	GC/DFCC/QTRS-702	29																				
3.	Type C	GC/DFCC/QTRS-703	02																				
36	Vol-5 Particular Specifications E&M and Associated Works, clause no. 3.2 Scope of E&M & Associated works.	<p>S. no 3.2.1, (1) (vi) states as follows: External Electrification of following location including provision of lighting poles / masts/high masts, luminaires, cabling, service mains, distribution boxes, wiring etc.: a. Circulating area of Service Buildings (i.e. Station and Depot), Residential Building, Parking, approach road constructed by civil Contractor (CP 303)</p>				<p>We understand that external lighting is to be provided for the roads constructed under CP303 contract and please provide the masterplan/ layouts indicating the roads between Station, depots &amp; Residential Building.</p>	<p>Please refer the clause 3.2.1 (1), Part 2, Vol 5 of the Bid Document.</p> <p>For external lighting and master plan/layout, the system contractor will interface with the civil contractor.</p> <p>Being a design &amp; build contract Functional Performance requirements have been specified. The detailed design is in the scope of the contractor.</p>																
37	Vol-5 Particular Specifications E&M and Associated Works, clause no. 9.1.1 (3)	<p>All Indoor fittings shall be IP-54 compliant. All Outdoor fittings shall be IP65 compliant seal safe or equivalent.</p>				<p>As we understand that IP54 compliant indoor light fittings are required for Station and depot buildings but not for residential quarters. Hence, we propose to change the IP rating from IP54 to IP20 for indoor lighting for residential quarters.</p>	<p>The Provisions of the Bidding Document shall prevail.</p>																
38	Part 2-Section VI-Vol-5 Particular Specifications E&M and Associated	<p>Tower Wagon Shed - 02 Nos. Out of which, One (1) Tower Wagon shed at Saharanpur shall be executed by the CST Contractor CP-303. However, Another One Tower Wagon Shed shall be executed under this</p>				<p>We understand that one Tower Wagon Shed will be constructed under scope of CP-305.</p>	<p>The Provisions of the Bidding Document shall prevail.</p>																

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	Works, clause no. 3.2.3(2) page 1096	Contract Package CP-305. The location of Tower Wagon Shed is to be decided by the Engineer. An indicative Building plan is shown in Drawing No-GC/DFCC/TWS/501 included in Part – 4;		
39	Part 2-Section VI-Vol-5 Particular Specifications E&M and Associated Works, clause no. 3..3(2) page 1096	Building construction for another one tower wagon shed (other than Saharanpur) including E&M and associated works for both the tower.	We understand that one Tower Wagon Shed will be constructed under scope of CP-305.	The Provisions of the Bidding Document shall prevail.
40	Part 2-Section VI-Vol-5 Particular Specifications E&M and Associated Works, clause no. 3..3(2) page 1113. Part 2-Section VI-Vol-5 Particular Specifications E&M and Associated Works, clause no. 18.4.1 (3)(2) page 604.	Tower Wagon Shed: The Tower Wagon shed shall be constructed along with Inspection pit by Contractor (CP 305). An indicative plan and elevation is shown in Drawing No.GC/DFCC/TWS/501.Plinth area of the layout proposed by the contractor shall not be less than the plinth area shown in the drawing. Shall Coordinate with the CST contractor and shall maintain a coordinator to continuous liaise with them, conduct meetings and seek information and keep the Engineer informed regarding completion of Blanket layer, Track fit for movement of Tower Wagon, Mechanized wiring Train and Material Train, stabling lines and Plan for Construction activities as per the Delivery schedule Shall take the access to the Blanket layer, Rail track and stabling siding for execution of the work. Shall construct Tower Wagon shed Shall coordinate with CST contractor for track connectivity of Tower wagon shed and final fitness of track for SED checks	We understand that scope for construction of Inspection pit is in scope of CP-305. But track for Pit line is not in the scope of CP-305.	Bidder understanding is correct, however bidder shall coordinate with CST contractor for track connectivity of Tower wagon shed and final fitness of track for SED checks.  Please refer clause no. 18.4.1 & Table no. 18.4.1(2) PS/Electrical of Volume 2 of the bidding document.
41	Part 2-Section VI-Vol-5 Particular Specifications E&M and Associated Works, clause no. 17.7.1 page 1186.	In Traction Substations (TSS), SP and SSP, the Contractor shall provide a road & rail system integrated with the transformer foundation to enable installation and the replacement of any failed unit by the spare unit located at the site. The Contractor shall take such rail and road system to the adjoining approach road for easy transport of the transformers and heavy	We understand that road & rail system will be integrated with the transformer foundation to enable installation and the replacement of any failed unit by the spare unit located at the site.	The provisions in the Bidding Document are self-explanatory and shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
		equipment through rail/road transport. This system shall enable the removal of any failed unit from its foundation to the nearest road.		
42	Part 2-Section VI-Vol-5 Particular Specifications E&M and Associated Works, clause no 3.3  Part 2-Section VI-Vol-5 Particular Specifications E&M and Associated Works, clause no 17.13	Section 3.3.1, table B-item 7 states : Auxiliary Power Substation(ASS) and D.G. Set : Activity by CP-305 'Construction of Structure / Fencing including E&M and associated works as required'  The provision of this clause is applicable to Traction substation (TSSs) and Switching Stations (SPs & SSPs) control room, Telecom Equipment Room, GSM-R Location and structure/fencing for Auxiliary Power substation & DG Set installation etc.	Please clarify the scope of works for the construction of Auxiliary Power Substation (ASS) building.	The Provisions of the Bidding Document shall prevail.
43	Section IV – Bidding Forms /Page No 127/1231	Price Schedule 2.0 – Apportionment of Contract Price for Payment according to Cost Centres 2.1 Electrical Works : 55% - 65% 2.2 Signalling Works : 22% - 32% 2.3 Telecommunication Works : 8% - 18%	Bidder Suggestion to revise the Price Schedule 2.0 – Apportionment of Contract Price for Payment according to Cost Centres to 2.1 Electrical Works : 55% - 75% 2.2 Signalling Works : 20% - 40% 2.3 Telecommunication Works: 05% - 25%	The Provisions of the Bidding Document shall prevail.
44	RFP CP 305-Page No 1254/ 18.2 (d ) clause	Minimum amount of Deductibles for Insurance of the Employer's Risk – should be Zero	Zero deductibles policy will not be available. In Each and every Insurance policy, some sort of Deductibles will be mentioned by the Insurer's according to the IRDA (Insurance Regulatory Development Authority) guidelines. So please reframe this clause	The Provisions of the bidding document shall prevail.  However, if the Contractor takes an insurance policy with deductibles according to the IRDA guidelines for the Employers Risk, in such cases deductibles, for the Employer's Risk, shall be borne by the Contractor.
45	Particular Conditions – Appendix to Tender Annexure – I Page No 37 of 52	Wholesale Price Index for Communication Equipment (Code 13111200000) published by Ministry of Commerce and Industry (Government of India) not available.	Based on Government of India Ministry of Commerce and Industry, Press Release dated May 12, 2017 Revision of Base Year of All India Wholesale Price Index (WPI) from 2004-05 to 2011-12. Tender document specified codes not available in the latest released codes. Please confirm whether to use	Please refer S.N. 11 of Addendum no. 08 read with Revised Appendix to Tender.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
			"Manufacture of communication equipment (1316030000) instead of WPI Communication Equipment (Code 13111200000)	
46	Particular Conditions – Appendix to Tender Annexure – I Page No 37 of 52	Wholesale Price Index for Electrical Machinery, Equipment & Batteries (Code 1311070000) published by Ministry of Commerce and Industry (Government of India) not available.	Based on Government of India Ministry of Commerce and Industry, Press Release dated May 12, 2017 Revision of Base Year of All India Wholesale Price Index (WPI) from 2004-05 to 2011-12. Tender document specified codes not available in the latest released codes. Please confirm whether to use "MANUFACTURE OF ELECTRICAL EQUIPMENT (1317000000) instead of WPI Electrical Machinery, Equipment & Batteries (Code 1311070000)	Please refer S.N. 11 of Addendum no. 08 read with Revised Appendix to Tender.
47	Particular Conditions – Appendix to Tender Annexure – I Page No 37 of 52	Wholesale Price Index for Electrical Accessories, Wires and Cables etc. (Code 1311080000) published by Ministry of Commerce and Industry (Government of India) not available.	Based on Government of India Ministry of Commerce and Industry, Press Release dated May 12, 2017 Revision of Base Year of All India Wholesale Price Index (WPI) from 2004-05 to 2011-12. Tender document specified codes not available in the latest released codes. Please confirm whether to use "Electric Wires & Cables (1317040003) instead of WPI Electrical Accessories, Wires and Cables (1311080000).	Please refer S.N. 11 of Addendum no. 08 read with Revised Appendix to Tender.
48	Particular Conditions – Appendix to Tender Annexure – I Page No 37 of 52	Wholesale Price Index for Steel (Long) (1310010200) published by Ministry of Commerce and Industry (Government of India) not available.	Based on Government of India Ministry of Commerce and Industry, Press Release dated May 12, 2017 Revision of Base Year of All India Wholesale Price Index (WPI) from 2004-05 to 2011-12. Tender document specified codes not available in the latest released codes. Please confirm whether to use "Mild Steel - Long Products (1314040000) instead of WPI Steel (Long) (1310010200).	Please refer S.N. 11 of Addendum no. 08 read with Revised Appendix to Tender.
49	Particular Conditions – Appendix to Tender Annexure – I Page No 37 of 52	Wholesale Price Index for Cement & Lime (1309030000) published by Ministry of Commerce and Industry (Government of India) not available.	Based on Government of India Ministry of Commerce and Industry, Press Release dated May 12, 2017 Revision of Base Year of All India Wholesale Price Index (WPI) from 2004-05 to 2011-12. Tender document specified codes not available in the latest released codes. Please confirm whether to use "Manufacture of cement, lime and plaster" (1313050000) instead of WPI Cement & Lime (Code 1309030000).	Please refer S.N. 11 of Addendum no. 08 read with Revised Appendix to Tender.
50	Section IV – Bidding Forms/	Price schedule 2.1.1, 2.1.8, 2.1.9, 2.2.4, 2.2.5, 2.2.6, 2.3.1, 2.3.3, 2.3.5, 2.3.6, 2.3.7	Price schedule 2.1.1, 2.1.8, 2.1.9, 2.2.4, 2.2.5, 2.2.6, 2.3.1, 2.3.3, 2.3.5, 2.3.6, 2.3.7	The Provisions of the bidding document shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	Page No 127 to 177	Payment will be made on completion of each payment stage as per weightage (s) given in this schedule	Bidder request to revise the condition to "Payment will be made on Pro Rate completion of each Payment stage as per weightage (s) given in the schedule. This will affect Bidder cash flow.	
51	Section IV – Bidding Forms/ Page No 127 to 177	Price Schedule 2.1.1, 2.1.9, 2.2.1, 2.2.6, 2.2.7, 2.3.1, 2.3.5, 2.3.8  Payment Note : Adjustment to contract price pursuant to GCC 13.8 shall NOT be applicable to the payments of works executed under this Cost Centre/Price Schedule	Price Schedule 2.1.1, 2.1.9, 2.2.1, 2.2.6, 2.2.7, 2.3.1, 2.3.5, 2.3.8  Bidder request to revise the payment note Adjustment to contract price pursuant to GCC 13.8 shall be applicable to the payments of works executed under this Cost Centre/Price Schedule. Above price schedule activities requires labour and services.	The Provisions of the bidding document shall prevail.
52	Section IV – Bidding Forms/ Page No 127 to 177	Price Schedule <b>2.1.2.14, 2.1.6.2</b> , Cost centre : <b>2.1.7, 2.2.2.12, 2.2.2.14, 2.2.4.16, 2.3.3.12</b> ( VSS ), 2.3.3.13 ( SCADA )  Supply & Installation are clubbed together in single line item.	Bidder request the customer to revise the price schedule with separate line item for supply and installation scope for the mentioned price schedules & cost centres.	The Provisions of the bidding document shall prevail.
53	Section IV – Bidding Forms/ Page No 133 of 177	Price Schedule 2.1.3, sub cost centre 2.1.3.3 Supply of Auto Transformer and 25KV/240V Aux Transformers as required at both the TSSs.	Bidder feels that Supply of Auto Transformer may not be required in case of VEE Solution. Please confirm whether payment can be received against the respective weightage.	The Provisions of the bidding document shall prevail.
54	Section IV – Bidding Forms/ Page No 138 of 177	Price Schedule 2.1.5, sub cost centre 2.1.5.6, 2.1.5.7, 2.1.5.8, 2.1.5.9, 2.1.5.10, 2.1.5.11, 2.1.5.12 Payment procedure specified as "Review and acceptance of system acceptance test report by the engineer"	Price Schedule 2.1.5, sub cost centre 2.1.5.6, 2.1.5.7, 2.1.5.8, 2.1.5.9, 2.1.5.10, 2.1.5.11, 2.1.5.12  Bidder request to revise the Payment procedure as "payment to be made based on Installation & Test Report"	The Provisions of the bidding document shall prevail.
55	Section IV – Bidding Forms/ Page No 136 of 177	Price Schedule 2.1.4, sub cost centre 2.1.4.6, 2.1.4.7, 2.1.4.8, 2.1.4.9, 2.1.4.10, 2.1.4.11, 2.1.4.12 Payment procedure specified as "Review and acceptance of system acceptance test report by the engineer"	Price Schedule 2.1.4, sub cost centre 2.1.4.6, 2.1.4.7, 2.1.4.8, 2.1.4.9, 2.1.4.10, 2.1.4.11, 2.1.4.12  Bidder request to revise the Payment procedure as "payment to be made based on Installation & Test Report"	The Provisions of the bidding document shall prevail.
56	Sub Clause 14.7 Payment	Payment of the amount due in each currency shall be made into the bank account of the contractor (Sole/JV, JVA) or its individually authorized members nominated by the contractor in the payment country (for this currency) specified in the contract	Please clarify whether as per the clause, is the Bidder able to get Alstom Transport SA portion directly to the designated Bank Account of Alstom Transport SA in its home country (central) if Alstom Transport SA directly bill to customer?	Please refer to Sub-Clause 14.7 of the General Conditions read with corresponding Particular Condition which is self-explanatory.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
57	Section IV – Bidding Forms/ Page No 172 of 177	Price Schedule 2.3.6 – Contract Spares Price Schedule 2.3.7 – Special Tools & Test Equipment	Price Schedule 2.3.6 – Contract Spares Price Schedule 2.3.7 – Special Tools & Test Equipment Bidder request to provide payment in Pro Rate basis.	The Provisions of the bidding document shall prevail.
58	Section IV – Bidding Forms/ Page No 146 of 177	Price Schedule 2.1.9, sub cost centre 2.1.9.2, Price Schedule 2.2.6, sub cost centre 2.2.6.2. Payment procedure specified as "Issue of Taking over certificate by the engineer"	Price Schedule 2.1.9, sub cost centre 2.1.9.2, Price Schedule 2.2.6, sub cost centre 2.2.6.2. Bidder request to revise the Payment procedure as "On readiness of commercial use of the system"	The Provisions of the bidding document shall prevail.
59	Section IV – Bidding Forms/ Page No 142 of 177	Price Schedule 2.1.7 E&M Works Supply & Installation are combined in single line item. Payment procedure mentioned as " Review and Acceptance of Installation Test Report by the Engineer"	Bidder request to change the price schedule separate for supply & installation. Bidder request not to link the Supply portion payment with the installation and acceptance.	The Provisions of the bidding document shall prevail.
60	Section IV – Bidding Forms/ Page No 145 of 177	Price Schedule 2.1.8  Payment Procedure "On supply of contract spares to the employer as per approved list duly inspected by the appropriate authority and approved by the engineer"	Bidder request to revise the payment procedure to " Payment to be made Pro Rata on material received"	The Provisions of the bidding document shall prevail.
61	Section IV – Bidding Forms/ Page No 150 of 177	Price Schedule 2.2.2 Note 4, Item 2.2.2.13 will be deemed to have been executed after successful Integrated testing and commissioning	Bidder request to revise the note 4, Items 2.2.2.14 will be deemed to have been executed after successful Integrated testing and commissioning	The Provisions of the bidding document shall prevail.
62	General	Items related to civil works in Price Schedule "Payment procedure mentioned as Acceptance of civil work by the engineer and issue of completion certificate".	Bidder request to revise the payment procedure related to civil works to "Payment to be based on civil work progress in stages".	The Provisions of the bidding document shall prevail.
63	Section IV – Bidding Forms/ Page No 155 of 177	Price Schedule 2.2.4 Note 4, Item 2.2.4.14 will be deemed to have been executed after successful integrated testing and commissioning	Bidder request to revise the note 4, Items 2.2.4.15 & 2.2.4.16 will be deemed to have been executed after successful Integrated testing and commissioning	The Provisions of the bidding document shall prevail.
64	ITB 29.8 - Page no 44 of 1271	The bidders may note that this DFCC project being funded by World Bank, qualifies for exemption from payment of customs duty on goods supplied/intended to be supplied to the project in terms of Govt of India's notification 84/97 customs dated 11.11.97 (read with all subsequent amendments ) . The bidders are also advised to ascertain the availability of customs exemptions for the goods supplied by their sub-contractors used as input for constructions of works.	In addition to availing customs duty exemption benefit of 84/97, for our sub-contractors importing material for supply of goods, we propose to inform our sub-contractors to import against advance authorization with zero BCD. Accordingly we request to issue the following :- 1) Project Authority Certificate 2) Payment certificate - For closure of Advance authorization. 3)Disclaimer certificate/Undertaking - To claim refund of GST from tax authorities	Only certificate in accordance with the provisions contained in Government of India's Notification No. 84/97-cus dated 11-11-1997 (read with all subsequent amendments) will be issued to the contractor.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
65	ITB 29.8 - Page no 44 of 1271	The bidders may note that this DFCC project being funded by World Bank, qualifies for exemption from payment of customs duty on goods supplied/intended to be supplied to the project in terms of Govt of India's notification 84/97 customs dated 11.11.97 (read with all subsequent amendments) . The bidders are also advised to ascertain the availability of customs exemptions for the goods supplied by their sub-contractors used as input for constructions of works.	We are submitting tender in consortium comprising of Indian partner & Foreign partner. The Foreign partner and Indian partners will submit their invoices for their scope and will get paid accordingly. Please confirm.	Please refer to response to query at serial no. 56 above
66	Sub-Clause 13.7 Adjustments for Changes in Legislation	"The Contract Price shall be adjusted to take account of any increase or decrease in Cost after the Base Date resulting from: a. a change in the Laws of the Country (including the introduction of new Laws and the repeal or modification of existing Laws); or b. in the judicial or official governmental interpretation of such Laws, or c. the commencement of any Indian law which has not entered into effect until the Base Date; or d. any change in the rates of any of the Taxes or royalties on Materials and Services that have a direct effect on the Project which affect the Contractor in the performance of its obligations under the Contract. Insert	For this project we propose to invalidate advance authorization in favour of our sub-vendors to import at zero BCD. As of now any import through AA has IGST exemption up to 30-9-18. Beyond 1-10-18 if the exemption is not extended. The existing changes in legislation does not consider this changes in IGST for raw material .Hence request you to include apart from the existing clause the following clause as follows :-  ( e ) The Contract Price shall be adjusted to take into account any new taxes or any statutory variation in Custom Duty and GST on finished product/ item /raw materials during the contractual completion period shall be to the Employer's account for which the Contractor shall furnish documentary evidence in support of their claims.	Provision(s) of the Bidding Documents shall prevail.
67	Staff & Labour. Clause no 6.4. Page no 37 of 103	The Contractor shall comply with all relevant labour laws applicable.	Please confirm applicability of BOCW cess on the project	The Building and Other Construction Workers Act is applicable to the Contract.
68	RFP CP 305- Page No 1254/ 18.2 (d ) clause	Minimum amount of Deductibles for Insurance of the Employer's Risk – should be Zero	Zero deductibles policy will not be available. In Each and every Insurance policy, some sort of Deductibles will be mentioned by the Insurer's according to the IRDA (Insurance Regulatory Development Authority) guidelines. So please reframe this clause	"Please refer to response to query at serial no. 44 above.
69	PART-2, SECTION-VI, VOLUME –2 10.1.2	The architecture of the SCADA systems and the OCC equipment under the Scope of Contractor CP-304, and shall allow expansion to control and monitor of the traction power supply installations for the entire Sahnewal – Pilkhani & Khurja - Pilkhani Section including present Khurja – Pilkhani section	Please confirm whether the Architecture of SCADA system for Auxiliary SCADA shall also allow expansion and monitor of Auxiliary power supply for entire Sahnewal – Pilkhani – Khurja section.	Please refer clause 10.1 (2) and (4) of Chapter 10 of Vol-5 of the Bid Documents.  The provisions in the Bidding Document are self-explanatory and shall prevail.



S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
70	PART-2, SECTION-VI, VOLUME –2 <b>10.2.2 (A)</b>	(1) Operator Work stations at OCC for Sahnewal – Pilkhani & Khurja – Pilkhani Section	Please confirm number of workstations required in OCC for Khurja-Pilkhani section & Sahnewal-Pilkhani Section separately	Refer S.N. 17 of addendum No. 08.
71	PART-2, SECTION-VI, VOLUME –2 <b>10.2.1 (16)</b>	The Video wall for displaying the status of equipment at OCC for the Khurja –Pilkhani Section shall be provided by the Contractor under Contract Package CP –305 as specified in PS Vol 3: Signalling Work of the Employer's Requirement. System Contractor (CP-304) shall display SCADA information on Video wall for the entire Khurja-Pilkhani-Sahnewal Section	Please confirm if SCADA video wall is to be supplied for display of Auxiliary power supply for entire Khurja-Pilkhani-Sahnewal section? Bidder's understanding is that the video wall requirement is only for displaying status of Traction Power Supply equipments & will be supplied for CP-304 & CP-305 by respective contractors	Refer S.N. 18 & 19 of addendum No. 08.  Please refer clause 4.7.1 and 4.8 of Chapter 4 of Volume 5 of the Bidding document.  The Provisions of the Bidding Document shall prevail.
72	PART-2, SECTION-VI, VOLUME –2 <b>10.2.2 (5)</b>	(5) Training Simulator with minimum 5 no. training consoles at OCC for training of SCADA Operators and maintenance staff. The Training Simulator setup includes minimum Training RTU, Training Server, Trainer Console and Trainee Console	1) The bidder's understanding is that Training servers need not be provided in the redundant configuration. Please confirm if this understanding is correct.	The Provisions of the Bidding Document shall prevail.
73	PART-2, SECTION-VI, VOLUME –2 <b>10.3.1</b>	(a) Adequate redundancy in system such that any single point failure shall not degrade the system availability or performance of SCADA equipment in any way the second level of failure shall be able to meet with crisscross redundancies.	Bidder assumes that redundancy in IO level is not expected since adequate redundancy will be met as required in the clause & with criss-cross redundancies. Please confirm if IO level redundancy is required? Please also clarify what is second point failure?	The Provisions of the Bidding Document shall prevail.
74	PART-2, SECTION-VI, VOLUME –2 <b>10.7.8, 10.10</b>	The SCADA system at OCC shall support data acquisition from RTU or other IED over Ethernet based IEC 60870-5-104 Remote Terminal unit (1) (d) The RTU shall be capable of communicating over IEC60870-5-104 with Control Centre, IEC 61850 for interface with Relays, BCU, IEDs; IEC 60870-5-103 for interface with protection equipment; Modbus protocol for communication with Energy and Multifunction meters on Ethernet communication with Intruder Detection system and Access Control System.	The Bidder assumes the use of IEC61850 Protocol for acquisition of data from IED to RTU since 10.10 is in conflict with 10.7.8. Bidder's understanding is that the use of one protocol IEC61850 would be acceptable.	The Provisions of the Bidding Document shall prevail.
75	PART-2, SECTION-VI, VOLUME –2 <b>10.10</b>	(10) Redundancy	Redundancy will be provided in Power Supply card, Communication channel, Processing card. The bidder assumes that there is no need for redundancy in IO cards. Please confirm the same.	Please refer sub-clause 10.3.1 (a) Vol-2 Part-2 of the bidding document of adequate redundancy. Please also refer 10.3.1(i), 10.8.1(a), 10.9.1(3 to 5) also.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
76	PART-2, SECTION-VI, VOLUME –2 <b>10.10. 1 General</b>	(q) The RTU should generally support the test procedures as per standard protocol IEC 60870-5-101 & 104;	Since RTU communicates with the Telecom back bone via switch over IEC 60870-5-104 bidder assumes that 101 is not relevant for this particular clause. Requests to amend the clause suitably.	The provisions in the Bidding Document are self-explanatory and shall prevail
77	PART-2, SECTION-VI, VOLUME –2 <b>10.12</b>	10.12. Network Management System	Bidder assumes that in SCADA the Network management system is only pertaining for SCADA equipment. However over all NMS will be supplied by Telecom contractor. Please confirm this understanding is correct.	The provisions in the Bidding Document are self-explanatory and shall prevail
78	PART-2, SECTION-VI, VOLUME –2 <b>10.13.2 ( 1 ) ( a )</b>	(iv) The RTU simulator shall be capable of emulating the slave protocols for both the IEC 60870-5-104, and IEC 60870-5-103 protocols for Protection relays	For protection relay RTU will communicate over IEC 61850 as specified in RFP but here the simulator is required to be capable for IEC 60870-5-103. Kindly clarify if IEC 61850 is acceptable. Also please confirm the protocol for protection relay communication.	The provisions in the Bidding Document are self-explanatory and shall prevail
79	PART-2, SECTION-VI, VOLUME –5 10.1	(Missing specifications of Auxiliary SCADA in RFP)	The bidder assumes that same specifications provided for Traction SCADA in Vol 2, Section VI are to be followed for Auxiliary SCADA to be supplied as part of Section VI, Vol 5. Request the employer to kindly provide the specifications for Auxiliary SCADA	Please refer Vol-V, Chapter-10 for auxiliary SCADA specification.
80	GENERAL ARRANGEMENT BLOCK DIAGRAM FOR AUXILIARY SCADA CONTROL		Bidder assumes that RTU is not required at LC/Auto location huts & S&T rooms but in General Arrangement drawing an RTU is indicated. Please confirm if RTU is required at these locations?	The provisions in the Bidding Document are self-explanatory and shall prevail
81	PART-2/ SECTION-VI/ Vol – 3/ 2.2.4(1) (b)	There shall be a Control terminal in Hot Standby mode provided at every Station with the Station Master. The Control terminal provided with the Station Master at the Station shall be used to control the Station yard and Block Section under control of the said Station Master. The display on the Control terminal shall include complete block section on both sides of the Station. It will also Display the current state of railway under control of the Station Master including modified automatic signals of mid-section. The complete display shall be available on the Control Terminal without scrolling. Multiple terminals shall be used, as required for proper display.	Please clarify on the modified automatic signals mentioned in the clause as there is no automatic block section in this tender.  Is there any plan to introduce Intermediate block signals? Please clarify	Please refer SN- 07 of Addendum no. 08.
82	PART-2/ SECTION-VI/ Vol – 3/	A suitable resetting scheme for manual resetting of axle counter track sections at stations and block sections shall have to be	As a part reset procedures line verification is to be provided. Please clarify if Line verification is to be provided for all track sections or only in point zones	Bidders understanding is correct. Manual resetting scheme needs to be designed for all the axle counter

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	2.2.5(3) (l)(a)	designed by the Contractor and approved by the Engineer. This shall be achieved through a mix of system design and the operating procedures.	areas as this impacts the amount of cable and I/O requirements.	track section at stations and in Block Sections.
83	PART-2 / SECTION-VI / Vol – 3 / 2.2.6(1) (h)	At Special class gate, the gateman shall be provided with audio visual 'Train Approach Warning' indication from a suitable distance (approximately 8 kms) on DFCCIL lines, as per approved GWR by IR depending on the gate position. When the train reaches at the approach warning track section in....is proved.	The list provided does not mention about any special class gate. Please clarify which gate is special class gate.	All gates as per list of Level Crossing at Appendix 8 of GS, Vol. 1, Part 2 Section VI shall be considered as Special Class Gates.
84	PART-2 / SECTION-VI / Vol – 3 / 2.2.6(1) (i)	At Special class gate / another warning buzzer shall also sound when the train reaches a suitable Distance (approximately 4 km in rear of the gate)(approach locking track section) on DFCCIL lines as per approved GWR by IR. At this stage / if the gate is in closed position / track locking of the booms shall take place so that the booms cannot be opened thereafter till the passage of the train from the level-crossing. The route will get automatically released with the passage of train past the nominated track sections ahead of the gate signal. The gateman will then be free to open the gate.	When the particular gate is not a special class gate please clarify if the 4 km warning buzzer need not be provided.	All gates as per list of Level Crossing at Appendix 8 of GS, Vol. 1, Part 2 Section VI shall be considered as Special Class Gates.
85	PART-2 / SECTION-VI / Vol – 3 / 2.2.6(1) (c)	However Construction of Signalling Equipment Room and Signalling Power Supply Equipment Room at all LC gates for DFC lines are in the scope of this contract. The IR gateman will operate the LC gates from the new gate lodges as per 'Working methodology for LC gates' at Appendix 1.	Also Confirm the following at New LC Gate (22) being constructed by CP-303 contractor. a) There is no need to extend the DFCC LT Power Supply at New LC Gate hut on IR side b) There is no need for any change in existing LT Transformer on IR side and the available 25KV/240V LT Transformer on IR side is sufficient for the new LC Gate lodge proposed to be used by IR Gate man.	Provisions of the Bidding document are self-explanatory and shall prevail.
86	PART-2 / SECTION-VI / Vol – 3 / 2.2.6(1) (e)	Single set of electrically operated common lifting barriers shall be provided outside the Indian Railways and DFCCIL tracks so as to protect both IR as well as DFCCIL tracks by one set of lifting barriers. In case the distance between IR and DFCCIL tracks is such that a single set of barriers is considered unsafe or operationally unmanageable / the provision of two separate set of barriers may become necessary. Such provision of two sets will also be deemed to be part of the work and shall not attract any extra payment. Decision of providing two separate set of barriers / shall be taken by the Engineer on the basis of local conditions.	Please confirm for what distance separate boom to be considered for DFC and IR lines. The power for operating the IR side ELB shall be provided from the IR equipment room & the power for operating the DFCCIL side ELB shall be from the DFCCIL equipment room. Please confirm our understanding.	Refer clause 7.2 of ITB Part-I sec.1. Reference document under Part -4.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
87	PART-2 / SECTION-VI / Vol - 3 / 2.2.6(2)(d)	The 110V power supply shall be extended from IPS located in LC Gate Equipment Room. The Power supply for Gate signals of both IR and DFC shall be extended from different IPS modules so as to avoid any interference.	The power supply for IR gate signal will continue to be fed from the present IR gate hut as per the existing arrangement and hence there is no need for power to come from the DFC Power supply room. Please confirm our understanding otherwise alterations become necessary to the IR Gate signals circuits.	Provisions of the Bidding document are self-explanatory and shall prevail.
88	PART-2 / SECTION-VI / Vol - 3 / 2.2.6(2)(d)	Main supply shall be taken from ATs of DFCC and IR	Please confirm our understanding that CP305 contractor shall work on the DFCCIL side of ATs only and any work on IR side is not in scope of present contract	Provisions of the Bidding document are self-explanatory.
89	PART-2 / SECTION-VI / Vol - 3 / 2.2.6(2)(e)	Separate power supply for IR and DFC shall be provided at all LC gates. Power supply shall be separate for IR and DFC equipment for maintainability. To achieve this / two separate IPS systems shall be supplied and installed. Construction of Signalling Equipment Room and Signalling Power Supply Equipment Room for DFC are in the scope of present contract	This clause in contradiction to clause 2.2.6(2)(d) where only diff IPS modules had been requested for but this clause calls for two different IPS Systems. Please clarify	Provisions of the Bidding document are self-explanatory and shall prevail.
90	PART-2 / SECTION-VI / Vol - 3 / 2.2.10(1)(i)(x)	Following Typical alarms (but not limited to) shall be generated by the system: Colour light LED Signal	Only main CLS LED units will be monitored using HMU. Please confirm if subsidiary signals can be excluded from being monitored.	The query is not clear. Since the reference clause is not correctly mentioned.
91	PART-2 / SECTION-VI / Vol - 3 / 2.2.4 (1) (b)	The display on the Control terminal shall include complete block section on both sides of the Station. It will also Display the current state of railway under control of the Station Master including modified automatic signals of mid-section. The complete display shall be available on the Control Terminal without scrolling. Multiple terminals shall be used / as required for proper display.	As Absolute block system is the scope of work; we can only display a particular station territory along with the distant signals on either side of the Home Signal of that particular station. i.e. UP & Down Side. Please confirm if our understanding is correct.	Provisions of the Bidding document are self-explanatory and shall prevail.  Please refer S.N. 07 of Addendum no. 08.
92	PART-2 / SECTION-VI / Vol - 3 / 2.2.4 (1) (b)	The display on the Control terminal shall include complete block section on both sides of the Station. It will also Display the current state of railway under control of the Station Master including modified automatic signals of mid-section. The complete display shall be available on the Control Terminal without scrolling. Multiple terminals shall be used / as required for proper display.	Wherever LC gates in block section are interlocked / the display shall be provided in a station which is controlling the concerned gate. Please confirm.	Bidders' understanding is correct.
93	PART-2 / SECTION-VI / Vol - 1 / GS / 14.9.3	The Contractor shall provide all tools / equipment / manuals and training necessary for the Employer/Engineer to maintain / re-configure and to make proper use of all the software provided under the Contract. This shall include supply of any specified	The contractor's liability will be limited to the supply of the software outputs generated which can be modified. Contractor shall provide access to configuration tools & proprietary compilers / linkers / editors etc through an ESCROW account with mutually acceptable terms. The	The provisions of the Bidding Document are amply clear and shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
		development tools required for maintenance of the software / including but limited to editors / compilers and linkers.	same process has been followed across major projects in India. Please confirm	
94	PART-2 / SECTION-VI / Vol-1 GS / 14.9.2	The Contractor shall provide to the Employer and the Engineer one (1) copy each of the software packages with the same software products as those that the Contractor intends to use for the project / inclusive but not limited to programs for business administration / project management / design development etc. The Contractor shall utilize a shared electronic document management system with the Engineer and the Employer which shall be web / internet based	The contractor's liability will be limited to the supply of the software outputs generated which can be modified. Contractor shall provide access to configuration tools & proprietary compilers / linkers / editors etc through an ESCROW account with mutually acceptable terms. The same process has been followed across major projects in India. Please confirm	Provisions of Bidding document shall prevail.
95	PART-2 / SECTION-VI / Vol-3 / 6.2.1	Type tests are performed on sample of Equipment prior to full production. Type tests are used to confirm that the proposed equipment is fit for purpose in the environmental conditions specified and meets the requirements of the specification including the EMC	The equipment/s for which type tests have been accepted by DFCCIL; the bidder need not subject such equipment to type tests again. Please confirm if our understanding is correct.	Provisions of the Bidding document are self-explanatory and shall prevail.
96	PART-2 / SECTION-VI / Vol-3 / 6.2.3	Type tests may be performed on Equipment procured as per Para 4.2.4 and 4.2.5 of this specification. However / the Type tests may be exempted if the Contractor is able to produce the Environmental and EMC test results earlier conducted on the Equipment and RDSO/DFCCIL are satisfied that the Equipment meet the required specification.	Type tests shall not be applicable on RDSO approved products or products bought from RDSO approved suppliers. Please confirm	Provisions of the Bidding document are self-explanatory and shall prevail.
97	PART-2 / SECTION-VI / Vol - 3 / 5.3.9	Where several cables of different categories have to be laid in the same trench / they shall be placed as far as possible in the following order starting from the main track side / so that in the event of failures / the maintenance staff may easily recognize the damaged cables:-	Most of the time / separate trenches for Signaling and Telecom are not feasible due to lack of space availability within the DFCCIL RoW. We request permission from DFCCIL to have a common trench for outdoor Signalling and Telecom Cables at all locations.	Provisions of Bidding document shall prevail.
98	Part-2 / Section VI / Vol - 3 / Clause:2.2.7(1) (a)	On the EDFC system, modern turnouts and derailing switches are programmed to be used. The turnouts shall be on 60 Kg rail with thick web switches and weldable CMS crossings.	Please confirm type of turnout to be used in EDFC line. Is it to be operated with single or double point machine which depends on length of stock rail? Please confirm scope of supply of back drive arrangement if required. Drawings of the turnouts may please be provided as part of the bid reference documents.	Provisions of Bidding Document are sufficiently clear.  The supply of back drive is not in the scope of work of present contract.
99	Part-2 / Section VI / Vol - 3 / Clause:2.2.4(2) (g)	The track-vacancy detection system in the station section on main line shall have Main system and Supervisory system. The Main and Supervisory systems shall be provided on different rails.	We understand that only Main lines shall have Main and supervisory system. The Loop lines of stations shall not need supervisory track sections. Please confirm.	Bidder's understanding is correct.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
100	PART-2 / SECTION-VI / VOL – 3 / 2.3.2(4) (h)	The system shall detect and resolve the following conflict situation: Same platform use / same route use / incompatible routes use / and same section use between two stations.	TMS Does not have the signalling controls; automatic conflict resolution is not feasible technically. It shall only provide a suggestion to the operator & conflicts will be managed through Electronic Interlocking. Request DFCCIL amend the clause to remove “ <i>and resolve</i> ”	Provisions of Bidding Document shall prevail.
101	PART-2 / SECTION-VI / VOL – 3 / 2.3.2(5) (p)	The user should be able to acknowledge / delete and retrieve alarms.	Alarm can be hidden from the HMI display and not deleted from TMS Database. Request DFCCIL to amend the clause	Provisions of Bidding Document shall prevail.
102	PART-2 / SECTION-VI / VOL – 3 / 2.3.2(1) (a)	The TMS display components like Video Wall Display System at OCC and TMS Terminals in the OCC and other locations shall show real-time geographical representation of the complete Signalling System of New Pilkhani- Khurja section. In order to show the signalling indications of boundary sections/IR stations, the TMS shall interface with other systems at boundaries to get their status on the displays.	Based on input availability from adjacent sections/IR stations, the indication will be provided. It may be limited to Train identification / timetable info of approaching trains. Please confirm.	Provisions of Bidding document are sufficiently clear.
103	PART-2 / SECTION-VI / VOL – 3 / 2.3.2(6) (f)	The System shall be able to import a roster plan. Roster plan shall associate Duty No. to every trip, provide the sign on/sign off time, break time & counselling time for each duty no. System shall also check for any conflict in the duty no. with respect to trips	Roaster Plan import features depends on the Crew management system configured. Kindly provide the details of the same.	Provisions of Bidding documents are sufficiently clear.
104	PART-2 / SECTION-VI / Vol– 3 / 2.3.7(1) (g)	The placement of Video Wall Display Panels, seating arrangement of the Controller's, viewing angle in vertical and horizontal plane etc. inside OCC shall be carefully planned. To ensure a user-friendly environment, an ergonomic study shall be performed by the Contractor to guarantee uniformity and consistency.	As OCC is common for all EDFC sections and designed as per the Ergonomic Study of EDFC- Phase 1, the bidder assumes that there is no need for separate ergonomic study. Please confirm if this understanding is correct.	Provisions of Bidding documents are sufficiently clear.
105	PART-2 / SECTION-VI / Vol– 3/2.3.2 (5) j	The TMS system shall support the generation, display and processing of specific events related to the performance of the Signalling and Train management system	Events are generated in TMS systems based on data received/processed by it. Please clarify if the generation of “specific events” mentioned here is with manual intervention.	Provisions of Bidding documents are sufficiently clear.
106	PART-2 / SECTION-VI / Vol– 3/2.3.2 (4) c	It shall be possible to edit the timetable graphically from the Train Graph display by drag and drop operations	Our understanding is that this feature is required in the offline timetable system. As editing an online/running timetable impacts whole operational schedule it's not suggested to be performed by drag/drop graphically. Please confirm.	Provisions of Bidding Document shall prevail.
107	Section IV / Bidding Forms / PRICE SCHEDULE 2.2.5	Apportionment of Contract Price for Payment of Cost Centre: TRAIN MANAGEMENT SYSTEM (TMS) AND SERVICE ANDDIAGNOSTICS SYSTEM (S&D)	For various sub cost centres of Price Schedule 2.2.5 / there may be phased delivery at project stage / therefore we would request you to allow the payment to	Provisions of Bidding document shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
		Note 1 : Payment will be made on completion of each Payment Stage as per weightage(s) given in this schedule	contractor on pro-rata completion of each payment stage. We request you to replace the Note 1 by following / which would help to improve the Project Cash Flow. :- <i>"Payment will be made on Pro-rata completion of each Payment Stage as per Weightage given in this schedule."</i>	
108	Part- 3 / Particular Conditions Sub-Clause 18.5	<b>Professional Indemnity Insurance Add the following new Sub-Clause:</b> "The Contractor shall obtain the professional indemnity insurance, to cover the risk of professional negligence in the design of the Works carried by him, for the amount(s) stated in the Appendix to Tender and the insurance shall be maintained in full force and effect from the Commencement Date of the Works until 03 (three) years after the expiry of the Defects Notification /Extended Defects Notification Period. The insurance policy is required to indemnify the Employer as joint insured and the cover shall apply separately to each insured as though a separate policy had been issued for each of the joint insured.	Bidder requests that the time period may please be reduced from 03 (three) years to 1 (one) after the expiry of defect notification period	Provisions of the Bidding Documents shall prevail.
109	Part- 3 / Particular Conditions Sub-Clause 20.6	<b>Paragraph b ( i )</b> In accordance with rules of Arbitration of the International Centre for Alternative Dispute Resolution, New Delhi or such other rule as may be mutually agreed by the parties and shall be subject to the provision Indian Arbitration and Conciliation Act, 1996	<b>Replace the contents of Paragraph b (i) with the following:</b> "In accordance with rules of Arbitration of the International Centre for Alternative Dispute Resolution, New Delhi or such other rule as may be mutually agreed by the parties and shall be subject to the provision of The Arbitration And Conciliation (Amendment) Act, 2015 (An Act to amend the Arbitration and Conciliation Act, 1996)	Please refer S.N. 10 of Addendum no. 08.
110	Part-2 / Section VI / Vol - 1 / Clause: 2.16.5 (1)	Class B1: Equipment Rooms with air conditioning with possibility of failure of air conditioning for duration of 2 hours or more at a time.	We understand that the upper limit on duration of failure of air conditioning equipment is to be designed for maximum of 2 hours.	Provisions of the Bidding Documents shall prevail.
111	Part-2 / Section VI / Vo I- 1 / 2.16.5 (2)	Requirements for Class A: Temperature Min 5°C to Max 35°C / Humidity Minimum 0% / Nominal 65% / Maximum 95% (Non Condensing)	Typically Telecom and IT infrastructure rooms are air conditioned such that humidity is well maintained much below the specified 95%. IT equipment being installed in Equipment room typically support 80% humidity. Hence / we kindly request you to reduce the 95% Humidity limit clause to 80% Non-Condensing	Provisions of the Bidding Documents shall prevail.
112	Part-2 / Section VI / Vol - 1 / 2.16.5 (2)	Requirements for Class B1: Temperature Min -2.5°C to Max 45°C / Humidity Maximum 100% (Non Condensing)	Class B1 is defined as Air-conditioned Telecom Equipment Room. Hence / Humidity in the equipment room is well controlled. In addition / none of the	Provisions of the Bidding Documents shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
			Telecom and Switching equipment meant for deployment in Indoor Telecom Equipment Room support 100% Humidity (meant for Outdoor or Buried environment – Class-C and Class-D respectively). Hence / we kindly request you to reduce the Maximum Humidity requirement to 90% Non-Condensing for Air-conditioned rooms.	
113	Part-2 / Section VI / Vol - 1 / 12.22.1	Defect Notification: If the results of 6 months average do not meet RAM specifications than the DNP period shall be extended with full DNP obligations of the Contractors. The same may be extended with /without penalty for further period similarly.	A) The bidder infers from the clause that RAM measurement will be for a rolling 6 month period after 6 months from the date of take-over. Please confirm if the understanding is correct.  B) The RAM performance shall be met by the bidder in the DNP of 2 years over a 6 month period. If the RAM performance is proven in the later stages of DNP the bidder assumes that there is no need for extension of the DNP.  C) Bidder also understands that the extension shall be limited to the next rolling one month period.	The provisions of the Bidding document are self-explanatory and shall prevail.
114	PART-2/ SECTION-VI/ Vol – 1 / GS 12.2.2	COMPLIANCE MANAGEMENT	The compliance activity will be performed as part of Project Hazard Log against the identified safety requirements linking to System requirements, validation (FIVP) and T&C reports which demonstrates the safety requirement identified. Please confirm if this fulfils the requirement of the clause.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor. The Provisions of the Bidding Document shall prevail.
115	PART-2/ SECTION-VI/ Vol – 1 / GS 12.9.2 12.9.7	(5) Design Safety Studies	Design Safety Studies is as same as Safety Case at design level demonstrating the design activities as per EN 50129. Hence Safety Case will be provided at the end of Design phase. Please confirm if this understanding is correct.	Bidder understanding is correct
116	PART-2/ SECTION-VI/ Vol – 1 / GS 12.9.6	(1). d (i and ii) other hazards including: i. environmental; ii. flooding; iii. noxious fumes; iv. suffocation; v. entrapment; and vi. burns.	Hazards related to natural disasters (like flooding, earthquake, etc...) will not be considered for the safety analysis since this is a natural cause and is beyond/out of the boundary of signalling system scope. Please amend the tender conditions accordingly	The Provisions of the Bidding Document shall prevail.



S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
117	PART-2/ SECTION-VI/ Vol – 1 / GS <b>12.9.6</b>	(2) (b) Evacuation	Evacuation is basically for Passenger service. But CP-305 is primarily for freight movement; hence evacuation can't be a part of safety analysis. Request DFCCIL to kindly confirm if applicable & or amend the clause suitably.	The Provisions of the Bidding Document shall prevail.
118	PART-2/ SECTION-VI/ Vol – 1 / GS <b>12.9.6</b>	(3) (f) The PHA shall take into account the how each type of hazard might arise including, but not limited to: a. inappropriate design or specification; b. equipment failure; c. installation error; <b>d. improper action (accidental or deliberate);</b> <b>e. inaction (unintentional or intentional); and</b> <b>f. external influence</b>	f. Can you please confirm, what is covered external influence? Could you please provide the definition for the same. d, e : Our understanding is it is Human/Operator error. Please confirm.	Provisions of Bidding document are amply clear and shall prevail.
119	PART-2/ SECTION-VI/ Vol– 1 / GS <b>12.9.6</b>	(4) The PHA will be followed with the following detailed hazard analysis: <b>a. Sub System Hazard Analysis (SSHA)</b> b. Interface Hazard Analysis (IHA) c. Operating and Support Hazard Analysis (O&SHA)	SSHA is performed at product level which is already certified by ISA. We will provide System Hazard Analysis (SHA) document instead of Sub-System Hazard Analysis (SSHA) document. Please confirm if this is acceptable.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor. The Provisions of the Bidding Document shall prevail.
120	PART-2/ SECTION-VI/ Vol – 1 / GS <b>12.19</b>	Proof of Safety	Signalling System Safety Case will demonstrate the proof of safety as per EN 50129. We understand that this will suffice for the fulfilment against this clause. Kindly confirm if this understanding is correct.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor. The Provisions of the Bidding Document shall prevail.
121	PART-2/ SECTION-VI/ Vol – 1 / GS <b>12.23.1</b>	Deliverable documents 1.System Safety Plan – Update is marked during trial run/revenue phase	There shall not be any update in Safety Plan during trial revenue phase. Bidder requests to remove the “U” from the table.	The Provisions of the Bidding Document shall prevail.
122	PART-2/ SECTION-VI/ Vol – 1 / GS <b>12.23.1</b>	Deliverable documents 1.Safety Policy	This policy is a part of System Safety Plan & not a separate document. We request the employer to merge this with the System Safety Plan.	The Provisions of the Bidding Document shall prevail.
123	Part 2/ Section VI/ Vol - 3 / <b>3.11.4</b>	(1) (f) FMECA	FMECA is a methodology to perform PHA, SHA, IHA etc. and hence no separate deliverable as FMECA. FMEA from RAM will cover the analysis for LRUs failure.	Provisions of Bidding Document shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
			Please amend the Tender condition accordingly.	
124	Part 2 / Sec VI / Vol- 3/ Design Safety Studies and Report 12.9.7 4 (d)	Anticipated Competence Levels Of Personnel In Commercial Operation	Design safety case shall not include the competencies of the Commercial Operation personnel. Competencies of Design and Project Engineering personnel will be included in the Quality management report. Please amend the Tender condition accordingly.	Provisions of Bidding Document shall prevail.
125	Part 2 / Sec VI / Vol- 3/ Design Safety Studies and Report 12.9.7 (e)	Software security (disabling of unauthorized access to operating system protection against intrusive attacks, loss of password integrity, etc.); and	Software security mentioned here is outside the purview of the signalling system functional safety. Please amend the Tender condition accordingly.	Provisions of Bidding Document shall prevail.
126	PART-2/ SECTION-VI/ VOLUME – 4/ 3.1.6	Wherever the equipment, being provided under Contract Packages CP-104, CP-105, CP-203 and CP-304 for EDFC are upgraded/augmented/reconfigured under this Contract, the service life of these upgraded/augmented/reconfigured equipment shall be minimum 15 years from date of commissioning of this upgradation/augmentation /reconfiguration.	We understand that clause related to service life is applicable only for upgraded/augment Hardware part or Software only and not applicable for whole equipment. Please confirm.	This clause refers to whole equipment and not for upgraded part.
127	PART-2/ SECTION-VI/ VOLUME – 4/ 4.6.2	Unless otherwise specified, all indoor Telecommunication Equipment installations shall be designed for operation continuously in environmental temperatures range of -5°C to +55°C.	Typically Telecom servers and PCs are installed in air-conditioned environment and supports temperature range from 0°C to +40°C. IT equipment (Servers etc.) operates at +35°C. We kindly request you to modify the temperatures range to 0°C to +40°C for Indoor equipment.	Provisions of Bidding document shall prevail.
128	PART-2/ SECTION-VI/ VOLUME – 4/ 5.3.3.3	The Second Network shall carry all Voice (including Emergency Communication) and Data (including Traction Power SCADA) Communication between Stations and LC Gates, GSM-R Locations, TSSs, SPs, SSPs, IMD, IMSDs, Staff Quarters etc. Second Network shall also carry all Signal Control Information, Track Vacancy Detection Information and other Vital & Safety Related Information between Stations, LC Gates This shall be formed by two optical fibre cables 24F (min), laid on either side of the track ensuring route diversity, from Khurja to Pilkhani and terminated on ODFs in TERs at Stations, GSM-R Locations, TSSs, SPs, SSPs, IMDs, IMSDs, LC Gates, Staff Quarters and any other location as required. Based upon design, locations of termination of optical fibre cables of Second Network can be clubbed with other Systems/Sub-systems under this Contract while meeting overall Telecommunication Requirements.	Should the OFC be terminated at Staff Quarters even if there is no requirement? Is it necessary that all Second Network locations where OFC is terminated must also be equipped with SDH?	Provisions of Bidding Document are sufficiently clear. Being a Design build contract, the design shall be proposed by the Contractor and approved by the Engineer at design stage after award of contract.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
129	PART-2/ SECTION-VI/ VOLUME – 4/ 5.3.3.5	At least 25% of fibres within each cable shall be reserved as spares for future use.	We understand that fibres except the spare portion (i.e. 25%) can be used for intra-Telecom usage. Please confirm.	Provisions of Bidding Document are sufficiently clear.
130	PART-2/ SECTION-VI/ VOLUME – 4/ 5.3.5.6	Flexible Access Multiplexer or Primary Order Multiplexer shall have minimum 50% spares for all types of Channel Circuits (Minimum 1 for all types of Channel Circuits).	Kindly clarify the meaning of 50% spares for all types of channels – whether the contractor is required to provide 50% spare channels between nodes at the backhaul link.	The Bidder / Contractor is required to provide 50% spare channels between Nodes.
131	PART-2/ SECTION-VI/ VOLUME – 4/ 5.3.9.13(2)	The NMS shall allow the user to configure all existing and new circuits with the following functions: (h) the OFC links from junction stations to the adjacent station of IR	SDH NMS cannot monitor the OFC links from junction stations to the adjacent station of IR unless there is an SDH connectivity established. Also, there is no Junction Station in Khurja – Pilkhani stretch. Kindly clarify the type of monitoring required.	Please refer S.N. 08 of Addendum no. 08.
132	PART-2/ SECTION-VI/ VOLUME – 4/ 5.5.3.3(1)	Flexible Access Multiplex Equipment shall conform to ITU-T Rec. G.703, G.704, G.706, G.707, G.708, G.709, G.711, G.732 and G.823.	Kindly note that ITU-T G.707, ITU-T G.708 and ITU-T G.709 are applicable to SDH equipment. Hence, they may please be removed as requirement from Flexible Access Multiplex Equipment.	Only applicable standards shall be used for Flexible Access multiplexer while designing the Telecom System.
133	PART-2/ SECTION-VI/ VOLUME – 4/ 5.5.3.3(6)	Adequate numbers of Primary Multiplexers shall be provided so that there is no loss of Communication at any point of time.	Normally, loss of communication is prevented by building Controller card and Power supply redundancy in the equipment. Kindly clarify how “Adequate number of Primary Multiplexers” shall be computed.	Being a Design build contract, the design shall be proposed by the Contractor and approved by the Engineer at design stage after award of contract.
134	PART-2/ SECTION-VI/ VOLUME – 4/ 5.5.3.3(7)	Flexible access multiplexer equipment shall be provided with 1+1 protection for all channel levels (VF, Data, etc.) with automatic switch over in case of fault.	Kindly confirm that “1+1 protection for all channel level (VF, Data, etc.) with Automatic Switchover” corresponds to SNCP equivalent functionality at the E1 backhaul link; as ITU-T Rec G.704 defines ‘channel’ as ‘64kbps time slot of E1’.	Provisions of Bidding Document are sufficiently clear. Please refer Clause 5.3.7.7 of PS/Telecommunication Works, Part 2, Section VI, Vol.4
135	PART-2/ SECTION-VI/ VOLUME – 4/ 6.3.1	WAN shall be created using Layer-3 Switches equipped with minimum 4 Nos. 10GigE Fibre Ports for backbone interconnections. WAN shall connect OCC, Stations, Khurja station, Pilkhani Station, IMD and IMSDs, in Ring Topology using Optic Fibre Cable. Further WAN shall connect TSSs with nearest stations in Redundant Linear Topology using Optic Fibre Cable. Locations of Layer-3 Switches can be clubbed based upon design of other Systems/Subsystems under this Contract while meeting overall Packet Data Communication Requirements.	It is possible to extend the WAN to IMD, IMSD and TSS by means of Layer-2 Switches placed at IMD, IMSD and TSS locations and connecting them to the Layer-3 Switches at nearby Station by means of Second Network Optical Fibre Cable. We understand that it is allowed to extend WAN to IMD, IMSD and TSS locations in this manner and it is not mandatory to provide Layer-3 switches at TSS and IMSD. Kindly confirm the same.	Provisions of Bidding Document are sufficiently clear and shall prevail.  Being a Design build contract, the Design shall be proposed by the Contractor and approved by the Engineer at design stage after award of contract.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
136	PART-2/ SECTION-VI/ VOLUME – 4/ 6.5.1.1	Layer-3 Switches of WAN shall have 20 Nos. 10/100/1000 Base-T Auto Sensing Ports with RJ 45 Connectors, 4 Nos. 100/1000 Base-X ports for SFP complying with IEEE 802.3, IEEE 803.3u and 802.3ab standard, and 4 No's of 10G BaseX ports supporting Half Duplex, Full duplex and Auto-Negotiation on each port to optimize bandwidth.	We understand that the clause refers to: 10Base-T with standard IEEE 802.3, 1000Base-T with standard IEEE 802.3ab, and 100Base-T with standard IEEE 803.3u. In that case, IEEE 803.3u should be replaced with IEEE 802.3u. Please confirm	Only applicable standards shall be used for Layer-3 Switches while designing the Telecom System
137	PART-2/ SECTION-VI/ VOLUME – 4/ 6.5.2.1	Layer-2 Switches of WAN shall have 24 Nos. 10/100 Base-T Auto Sensing Ports with RJ 45 Connectors, complying with IEEE 802.3, IEEE 803.3u and 802.3ab standard, supporting half duplex, full duplex and Auto-Negotiation on each port to optimize bandwidth.	We understand that the clause refers to: 10Base-T with standard IEEE 802.3, 1000Base-T with standard IEEE 802.3ab, and 100Base-T with standard IEEE 803.3u. In that case, IEEE 803.3u should be replaced with IEEE 802.3u. Please confirm.	Only applicable standards shall be used for Layer-2 Switches while designing the Telecom System.
138	PART-2/ SECTION-VI/ VOLUME – 4/ 6.5.2.12	All equipment of Data Networking System shall work from 180 to 270 V 50 $\pm$ 3% Hz AC single phase supply from UPS.	No COTS Data Network System equipment works on 180 to 270 V 50 $\pm$ 3% Hz AC. Kindly re-consider the clause.	Provisions of Bidding document shall prevail.
139	PART-2/ SECTION-VI/ VOLUME – 4/ 7.1.2	The Telephone System shall comprise of Administrative Telephone Network, Direct Line Telephone (DLT) Network, Gate & Block communication system, Control Communication System, and Emergency Communication System.	Our understanding is Gate & Block communication system is a part of PBX system	Provisions of Bidding Document are sufficiently clear.
140	PART-2/ SECTION-VI/ VOLUME – 4/ 7.5.6.3	Multi-core cables shall be provided and connected from the distribution frames inside TER to the distribution frames at the MDF for connection between the PBX and the trunk circuits of PSTN. The interface between the Telephone system and the PSTN circuits shall be at the MDF.	Our understanding is Employer will provide the PSTN connectivity at Station MDF, Contractor will integrate with PBX system.	Please refer SN - 28 addendum no 08.
141	PART-2/ SECTION-VI/ VOLUME – 4/ 7.3.7.6	Indian Railway Telephone Network shall be integrated with Direct Line Communication System, so that one touch dialling can be done from Direct Line Console to important Operation Locations of Indian Railway as decided by the Engineer.	Telephone System of CP-305 is required to be integrated with CP-104, CP-203, CP-105 and CP-304. Also, CP-104 is being integrated with IR. It is suggested that all calls to IR may be carried over the IR Telecom network once handed over to IR on that interface. Please confirm the same.	Provisions of Bidding Document are sufficiently clear. Also refer clause 17.3.4(2) of PS/ Telecommunication Works.
142	PART-2/ SECTION-VI/ VOLUME – 4/ 7.3.8.2	After integration, Administrative Telephone Networks shall provide following feature transparency across all the PBXs provided under this Contract as well as under Contract Package CP-104, CP-105, CP-203 and CP-304	Please note that Integration and interoperability depends on both sides supporting the feature in a standard manner, wherein the standard shall ideally be an International standard such as ITU, Indian Standard or an establish industry standard. Therefore, please	The successful bidder shall coordinate with the contractor of CP-104, CP-203 and CP-105 for successful implementation of the feature.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
			confirm that the integration responsibility and feature transparency requirement shall be a joint responsibility.	Also refer clause 17.3.3 of PS/ Telecommunication Works.
143	PART-2/ SECTION-VI/ VOLUME – 4/ 7.3.8.9	If integration is done by upgrading PBX, Telephony Servers, Telephone NMS and associated equipment provided at OCC under Contract Package CP-104: (2) The Contractor shall be responsible and liable for upgraded PBX, Telephony Server, Media Gateway, Telephone NMS and other associated equipment during Defect Notification Period and during Service Life.	We understand that liability during Defect Notification period shall be limited to upgraded part only and not for the complete equipment. Please confirm.	Please refer to Clause 14.1 of General Specification of the Bidding Document.
144	PART-2/ SECTION-VI/ VOLUME – 4/ 7.3.7.8(3)	It shall be possible from Direct Line Telephone to make normal and emergency direct line calls to the designated controllers in OCC. Different audio and visual indications shall be provided for incoming direct line calls on the Direct Line Consoles or Direct Line Telephone for normal and emergency calls.	Our understanding is, different audio and visual indications are not applicable for gate phone, since analog phone is required and working shall as per gate working rule approved by IR.	Provisions of Bidding Document are sufficiently clear.
145	PART-2/ SECTION-VI/ VOLUME – 4/ 7.3.8.5	Direct Line Telephone Network shall be integrated with DTL Network provided under CP- 104, CP-105, CP-203 and CP-304.	DTL Network shall be replace with DLT Network	Bidders understanding is correct
146	PART-2/ SECTION-VI/ VOLUME – 4/ 7.3.8.8 (1)	PBX provided under this Contract shall be integrated with PBX provided under other contract packages of EDFC through minimum 4 PRI for Administrative Telephone Network and 4 PRI for DLT Network. PBX provided under Contract Packages CP-104, CP-105, CP-203 and CP-304 shall be suitably upgraded for this integration.	Our understanding is PBX provided under Contract Packages CP-104, CP-105, CP-203 and CP-304 are already integrated , therefore integration with CP305 is required at one point through 4 PRI for Administrative Telephone Network and 4 PRI for DLT Network. Please confirm	Provisions of Bidding Document are sufficiently clear.
147	PART-2/ SECTION-VI/ VOLUME – 4/ 9.1.2	This Synchronized Time Information shall be used to synchronize slave clocks which shall be located at Stations, Depots & Offices in Khurja – Pilkhani section of EDFC Phase-III.	Kindly clarify the location of offices since there is no mention of "Offices" in Clock Schedule mentioned in PS Clause 9.3.5.	Kindly refer clause no. 9.3.5 for details of offices/buildings.
148	PART-2/ SECTION-VI/ VOLUME – 4/ 9.5.3.9	The Master Clock System shall be capable to work with 230 Volts +/- 10% AC 50 Hz Power Supply. The power supply shall have backup from UPS.	The Master Clock Unit and Sub-Master Clock Units will be deployed in the TERs and stable battery backed up - 48V DC supply is present at TER. Therefore, DC may be permitted as a source for Master Clock System. Similarly, the Clocks may be powered by POE. Kindly request you amend the clauses accordingly.	Provisions of Bidding document shall prevail.
149	PART-2/ SECTION-VI/	The Master Clock System shall be based on a 'Central Master Clock', which shall be synchronised to 'Universal Time Co-ordinated' (UTC) by Radio Signals	Our understanding is that Master Clock System deployed under CP104, shall be upgraded to cater the master clock requirement in this phase.	Provisions of Bidding Document are sufficiently clear.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	VOLUME – 4/ 9.3.1	transmitted via the US Department of Defence's 'Global Positioning System' (GPS) Real Time Navigation Satellites.	Please confirm this.	
150	PART-2/ SECTION-VI/ VOLUME – 4/ 9.3.4	At OCC, Station, Depot and Office, a Sub-Master Clock Unit shall receive the time information from the Central Master Clock and shall convert it into synchronization pulses for the slave clock units at those locations.	Our understanding is that Sub-Master clock is already provided at OCC by CP104, same shall be upgraded to cater the Sub-master clock requirement in this phase. Please confirm this.	Provisions of Bidding Document are sufficiently clear.
151	PART-2/ SECTION-VI/ VOLUME – 4/ 11.5.2.1.1	Fixed Box Type IP Cameras shall have following technical specifications as a minimum: 9. Shutter Speed: 1 to 1/1,00,000	As per our previous experience we understand that shutter speed of 1/100,000 is not possible. We request you to update the shutter speed to 1/10,000 (100 uSec).	Please refer SN-20 of addendum No. 08.
152	PART-2/ SECTION-VI/ VOLUME – 4/ 11.5.2.7.1	8 Port Layer-2 Switches are to be provided for field applications. These switches should have one 10/100/1000 SFP Port (fibre port) and 7 fast Ethernet Ports with RJ-45 Connectors, complying with IEEE 802.3, IEEE 803.3u and 802.3ab standard. These Layer-2 Switches should also be PoE compliant as per IEEE 802.3af.	We understand that the clause refers to: 10Base-T with standard IEEE 802.3, 1000Base-T with standard IEEE 802.3ab, and 100Base-T with standard IEEE 803.3u. In that case, IEEE 803.3u should be replaced with IEEE 802.3u. Please confirm.	Only applicable standards shall be used for Layer-2 Switches while designing the Telecom System
153	PART-2/ SECTION-VI/ VOLUME – 4/ 12.2.2	Provision of suitable Earth Leakage Detector and Alarms shall be made individually at each location (OCC, Stations, GSM-R Locations, LC Gate Locations, etc.).	Please note that an Earth Leakage detector is connected at the (-48 VDC) output of the SMPS battery charger. For taking -48VDC the positive polarity of the battery charger is earthed with the telecom load. That means an Earth leakage detector will always give false alarm. Even if some of the feeders are not earthed then also it will give this alarm. You are requested to remove this requirement that leads to false alarms generation or amend the clause suitably.	Please refer SN – 29 addendum no 08.
154	PART-2/ SECTION-VI/ VOLUME – 4/ 12.3.7	The following data shall apply to 48 V DC Battery Backup System: (1) Input Voltage Range (Single phase): 230 V AC (+10 %, - 20%) (2) Input frequency: 50 Hz +/- 5% (3) Output Current: As required for each location	As per Clause no 12.3.4 of PS Telecommunication Compliance to specification RDSO/SPN/TL-23/99 VER 4.0 is required. The AC voltage range specified in this specification is 165V – 260VAC, frequency 50 Hz+/- 2Hz (means from 48 Hz – 52 Hz). Please amend the clause accordingly.	Please refer SN- 21 and 22 of addendum No. 08.
155	PART-2/ SECTION-VI/ VOLUME – 4/ 13.7.6	Outdoor Signalling Cables and Outdoor Telecommunication Cables shall not be laid in same trench. If it is inescapable to lay Signalling Cables and Outdoor Telecommunication Cables in same trench, suitable separation shall be provided between the two as per the requirement of PS-Signalling Works, IRSEM and	Most of the time, separate trenches for Signaling and Telecom are not feasible due to lack of space availability with the DFCCIL RoW. Hence, It is requested in order to maintain uniformity across project, the outdoor Signalling and Telecom Cables in same trench may be permitted at all locations. Kindly confirm.	Provisions of Bidding document shall prevail. Also Please refer Part 2, Vol.3: Signalling Works of Bid Document.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
		Indian Railway Telecommunication Manual and approved by the Engineer.		
156	PART-2/ SECTION-VI/ VOLUME – 4/ 17.1.8	Contractor shall liaison with designated authorities in Indian Railway to design Telecom Arrangement for/at boundaries with Indian Railways. The contractor shall execute the so approved Telecom Arrangement for/at boundaries with Indian Railways.	We understand that any extension of Telecom to IR shall end at DFCCIL / IR boundary and further extension will be carried out by IR, especially any excavation near the IR tracks / IR yard outside the DFCCIL boundary. Please confirm.	Provisions of the Bidding Document are sufficiently clear.
157	PART-2/ SECTION-VI/ VOLUME – 4/ 2.3.4.3 Page 172	Supply of Cab Radio complete with power supply, battery pack, antenna, software & accessories	No spares are to be provided as a part of Cab Radio Supply. Please confirm	Provisions of the Bidding Document are sufficiently clear.
158	PART-2/ SECTION-VI/ VOLUME – 4/ 8.6.3 Page 1012	Wherever the equipment of MTRC System being provided under Contract Package CP- 304 is being upgraded / augmented / reconfigured, the same shall not in any way utilize available provision of expansion.	We understand complete new MTRC system needs to be proposed for CP-305 package. Kindly confirm	Provisions of the Bidding Document are sufficiently clear.
159	PART-2/ SECTION-VI/ VOLUME – 4/ 8.5.1.1 point 3 Page 1004	Voice Recording System (VRS) interfaced to above Network Sub-Systems (NSS) for recording voice communications taking place on RDC, Cab Radio and OPH. All voice communications of Radio Dispatcher Console, Cab Radio and Operation Radio shall be recorded by the Voice Recording System (VRS) being provided under Contract Package 304. The Contractor shall be responsible for upgradation/reconfiguration, if required, of Voice Recording System (VRS) being provided under Contract Package CP-304 to meet the requirement under this contract.	We understand VRS need not be supplied as part of Package 305 supply. Existing VRS needs to be integrated with new Network elements being proposed as part of Package 305. Kindly confirm	Provisions of the Bidding Document are sufficiently clear.
160	Clause 8.3.6.5 Point 3 Page 995	The following call related services are to be supported for each type of mobile radio: Restriction of display of user identity	This is a network feature and should be removed from mobile handsets	Provisions of Bidding Document shall prevail.
161	PART-2/ SECTION-VI/ VOLUME – 4/ 7.5.4.1 Page 998	The VRS shall provide recording of stipulated voice conversations over Telephone System. It shall be a digital system providing sufficient capacity for recording up to 4 weeks before being overwritten. The VRS shall comply with the requirements as given below.	Kindly confirm if new VRS system needs to proposed for CP 305 or existing VRS system of CP-104, CP-105 & CP-203, CP-304 can be expanded to cater to CP 305 requirement as well.	Provisions of the Bidding Document are sufficiently clear.
162	PART-2/ SECTION-VI/ VOLUME – 4/	The VRS shall provide recording of stipulated voice conversations over Telephone System. It shall be a digital system providing sufficient capacity for recording up to 4	Please confirm the subscriber count and Active subscriber ratio in case new VRS system needs to be proposed	Being a Design build contract, the Design shall be proposed by the Contractor and approved by the

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	7.5.4.1 Page 998	weeks before being overwritten. The VRS shall comply with the requirements as given below.		Engineer at design stage after award of contract.
163	PART-2/ SECTION-VI/ VOLUME – 4/ 7.5.4.1 Page 998	The VRS shall provide recording of stipulated voice conversations over Telephone System. It shall be a digital system providing sufficient capacity for recording up to 4 weeks before being overwritten. The VRS shall comply with the requirements as given below.	We understand VRS system for GSM-R package is independent of other packages. This is applicable on all packages CP-104, CP-105 , CP-203, CP-304 & CP-305. Kindly confirm	The referred clause pertains to Telephone System and not GSM-R
164	PART-2/ SECTION-VI/ VOLUME – 4/ 8.2.5.1 Point 5 Page 992	(5) Upgradation/Augmentation/Reconfiguration of Radio Dispatcher Consoles and associated hardware/accessories, software and licenses provided under Contract Package CP-304 to meet the requirement of this Particular Specification;	Kindly confirm if new Radio dispatcher system needs to be proposed for CP 305 or existing Radio Dispatcher system of CP-304 can be expanded to cater to CP 305 requirement as well.	Provisions of the Bidding Document are sufficiently clear.
165	PART-2/ SECTION-VI/ VOLUME – 4/ 8.3.10.2 Page 997	Contractor shall also provide one Radio Dispatcher Console at TER in OCC at Allahabad. This shall be used for maintenance purposes.	Kindly confirm if new Radio dispatcher system (Quantity=1) needs to be proposed for CP 305.	Provisions of the Bidding Document are sufficiently clear.
166	PART-2/ SECTION-VI/ VOLUME – 4/ 8.1.2 (page 991) and 8.5.1 (page 1004)	The system shall be designed based on European Integrated Railway Radio Enhanced Network (EIRENE)'s Functional Requirements Specification (EIRENE FRS v7.3.0) and System Requirements Specification (EIRENE SRS v15.3.0).	Bidder understands that latest EIRENE specification shall be followed and used as specified in clause 8.5.1 and in GS. Please confirm this is correct.	Kindly refer Para 2.5.1, Part-2, Section (VI), Volume-1 of General specification.
167	Part 3 Section VIII Particular Conditions Sub- Clause 14.7 Payments	Payment of the amount due in each currency shall be made in to the bank account of the Contractor (Sole/JV/JVA) or its individually authorised member(s), nominated by the Contractor in the payment country (for this currency) Specified in the Contract. However, in respect of foreign currency payments, copies of supporting documents evidencing the import of goods /services shall be submitted by the Contractor."	In case of a consortium composed by onshore and offshore companies, could you please confirm that each member of the consortium will invoice for their respective portions in the respective currencies (i.e. INR for onshore consortium members and foreign currencies for offshore consortium members limited to a maximum of three foreign currencies) And DFCCIL shall pay the amount directly to the respective bank account of each member of the consortium	Please refer to response to query at serial no. 56 above
168	Part 3 Section VIII Particular Conditions Sub- Clause 8.7 Delay Damages		LD to be sole & exclusive remedy. Kindly clarify.	Please refer to the 2nd paragraph of Sub-Clause 8.7 of the Particular Conditions, which is as follows:  "It is agreed that recovery of Damages under this Sub-Clause



S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
				shall be without prejudice to the rights of the Employer under this Contract including the right of Termination thereof."
169	Part 3 Section VIII Particular Conditions – Appendix to Tender  Advance Payment 14.2	Mobilization Advance The Employer shall pay, on written request from the Contractor, an interest free Mobilization Advance up to (Ten) 10per cent of the Contract Price. The Mobilization Advance shall be released in two instalments as under: (a) Up to (Five) 5 per cent: On Submission of Performance Security and commencement of <u>mobilization process</u> ; and	Please elaborate the meaning of Mobilization process in case of advance payment."  What are the key activities included in this mobilization process which will require completion enabling contractor to get the 5 % advance payment.	After the commencement of Works, the Engineer shall decide the mobilization activities which should have been completed to conclude that the Mobilization Process has commenced.
170	Part 1 Section III Evaluation & Qualification Criteria 2.3 Personnel  Minimum Education Qualification	B.E. (Electrical / Electronics) or Equivalent B.E. (Electrical / Electronics / Telecommunication) or Equivalent -----	Please specify if Diploma with sufficient relevant work experience can also be considered for these positions. In general Diploma Holder with 7-10 Years relevant should be equivalent to BE Engg. Please confirm	Provisions of the Bidding Documents shall prevail.
171	Part 1 Section III Evaluation & Qualification Criteria 2.3 Personnel Minimum Education Qualification	B.E / B. Tech or equivalent Sr. No 1 to Sr. No 20	As per our understanding Government/UPSC and other govt. organizations considers AMIE equivalent to Degree in engineering. Please confirm that our understanding is correct. This is as per Law of Land also.	Bidders understanding is correct.
172	Part 1 Section III Evaluation & Qualification Criteria 2.3 Personnel Minimum Education Qualification	Degree documents	Please confirm that the documents required to be submitted regarding Qualification of Key personnel will be required for approval purpose only at project stage.  And also please confirm that there is no extra validation required by specific authority.	Documents regarding qualification and experience shall be submitted to the Engineer for his consent before the personnel mobilise to site of work.  There is no validation required from any authority at the tender stage.
173	Part 1 Section III Evaluation & Qualification	Sr. No 1,2,3,,5,6,7, and 12  International Experience	We insist that there may be resources with required technical expertise and experience of Electrification and Signaling projects in India without required international	Provisions of the Bidding Documents shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	Criteria 2.3 Personnel Total Work Experience		experience, as many projects of International nature & Competitive Bidding projects (like DFCC, DMRC, Other Metros) are executed in INDIA by Indian experts. In our view International experience should not be a mandatory requirement for these positions. Please confirm that it is possible to submit CV with experience in International Competitive bidding Projects of INDIA.	
174	Part 3 General Conditions /Particular Conditions  13.7 Adjustments for Changes in Legislation	The Contract Price shall be adjusted to take account of any increase or decrease in Cost after the Base Date resulting from: a. a change in the Laws of the Country (including the introduction of new Laws and the repeal or modification of existing Laws); or b. in the judicial or official governmental interpretation of such Laws, or c. the commencement of any Indian law which has not entered into effect until the Base Date; or d. any change in the rates of any of the Taxes or royalties on Materials and Services that have a direct effect on the Project which affect the Contractor in the performance of its obligations under the Contract.  <b>Insert at the end of the Sub-Clause:</b> If as a result of change in law, interpretation, or rates of taxes or royalties, the Contractor benefits from any reduction in costs for the execution of this Contract, save and except as expressly provided for in this Sub-Clause or in accordance	EOT and Cost due to shortage of material caused by the authority / Government Resolution / Judicial Judgements should be allowed under change in the law / delay caused by authority.	Provisions of the bidding Documents shall prevail.
175	Part 3 General Conditions / Sub-Clause 10.2  Particular Conditions Sub-Clause 10.2 Taking Over of Parts of the Works	10.2 Taking Over of Parts of the Works The Engineer may, at the sole discretion of the Employer, issue a Taking-Over Certificate for any part of the Permanent Works.  Delete the Sub-Clause 10.2 in its entirety.	As progress of CP 305 will depend on many external factors like Civil /Track access , Local authorities , Govt. institutions responses time we request you to have a provision to take over the permanent works in parts .  Customer (PMC/DFCCIL) shall issue the Taking over certificate for the parts which have been completed by CP 305 contractor. The sections which are completed by CP 305 contractor	Provisions of the Bidding Documents shall prevail.
176	Part 3 General Conditions /	The Contractor shall be entitled to terminate the Contract if:	In our view it is just and fair for a CP 305 contractor to have right to terminate the contract in case Employer fails to perform his obligation for CP 305 project.	Provisions of the Bidding Documents shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	16.2 Termination by Contractor (d)	(d) the Employer substantially fails to perform his obligations under the Contract,	We request you to amend the Sub-Clause 16.2 Particular Conditions accordingly.	
	Sub-Clause 16.2 Particular Conditions	Delete the Sub-Clause 16.2 (d) Delete the following words from 16.2 (e) “ or Sub-clause 1.7 [Assignment]”		
177	Part 1 Section IV Bidding forms Form MOU Clause 16  Part 1 Section I ITB Clause 4	This MOU shall be construed under the laws of the Bidder's actual or intended country of Registration.  Bidder can be a Joint Venture or association (JVA) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent.  All partners of Joint venture shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms, and JVA shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the partners of the JVA during the bidding process and, in the event the JVA is awarded the Contract, during contract execution.	As per clause 4 of ITB we understand that Bidder can be an unincorporated joint venture having one authorized representative  While clause 16 of Form MOU states about Bidder's actual or intended country of Registration.  Both of these statements seem contradictory hence require clarification whether Unincorporated JV is allowed for this bid or JV needs to be incorporated  Please clarify.	Unincorporated joint venture / consortium is allowed to bid subject to already prequalified.
178	Section IV Bidding Forms Form SUP Proposed subcontractors and Suppliers for Major items of the work	<b>Column 4 :-</b> Approximate Value of proposed Subcontracting Items (in percentage of the approximate total value of the Contract)	As this is Technical Submission stage only which means that calculating the approximate cost of small subcontracting works will not be possible, we request you to waive off this requirement at this stage and it should be submitted with Second stage submission.  We can declare in form SUP that “the Approximate Value of proposed Subcontracting Items will be submitted with second stage bid submission.”  Please confirm.	Provisions of the Bidding Documents shall prevail.
179		“[...] the prices shall be quoted by the Bidder entirely in Indian Rupees [...]. A Bidder expecting to incur expenditures in other currencies for inputs to the Works supplied from outside the Employer's country shall indicate [...] the percentage of the bid price needed by him for the payment of such foreign currency requirement, limited to no more than three foreign currencies [...]	It is a standard practice that payments to offshore suppliers/offshore consortium members are made through sight irrevocable and confirmed Letter of Credit. Could you clarify whether payments to offshore consortium members will be made through Letter of Credit?	No payment shall be made through letter of credit.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
180	Section III Evaluation and Qualification Criteria; 2.4	** (A Bidder shall also be required to submit a certificate, from the developer / vendor of the software, that the simulation.....	Since generally Simulation Software Developer / Vendor sell their software to Engineering companies for them to use and they have no control over the Projects it is being used, it is not possible to get a certificate from Developer / Vendor.	Provisions of the Bidding Documents shall prevail.
181	Particular Specification, Part 2, Section VI, Vol 2, Page 482 of 1271 Clause No. 6.13.5	Installation and mitigation guidelines IEC 61000-part 5 -6 series of guidelines on mitigation of external EM influences shall be observed wherever applicable.	Installation and mitigation guidelines for Earthing and cabling will be used to achieve EMC. Kindly replace 61000-5-6 by 61000-5-2	The provisions in the Bidding Document shall prevail
182	Particular Specification, Part 2, Section VI, Vol 2, Page 483 of 1271 Table 6.13.9	Immunity levels at various ports	As per our understanding, we need to follow the immunity level mentioned in EN 50121-5 latest update. According to the standard EN 50121-5 for Railway fixed installation, values mentioned in the table 6.13.9 are different. In order to achieve EMC we will adhere to the standard EN 50121-5 dedicated to Railway fixed installation. Kindly confirm our understanding.	The provisions in the Bidding Document are self-explanatory and shall prevail
183	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.1.1.	Point (8) RAMS requirements of the Systems have been identified, apportioned to various subsystems and elements of the works and the associated designs for these have been demonstrated to be capable of meeting their allocated performance targets.	The bidder will consider the Systems RAMS requirements and their performance target; as detailed in their particular specifications (PS) i.e. <ul style="list-style-type: none"> <li>Vol 2 for Traction Electrification,</li> <li>Vol 3 for Signalling and</li> <li>Vol 4 for Telecom</li> </ul> to demonstrate the System performance as per PS. The Definition of SYSTEM is not defined in the bidding document. As per Contractor understanding, it's on Rail Sub System Level as specified in the reference clauses in Volume 2, 3 & 4. Please confirm.	The Bidder/Contractor shall demonstrate fulfillment of RAMS requirement and their Performance target, for the system/sub-systems as specified in the respective PS.
184	Part 2/ Section VI	[1] Vol 1/ GS/ CH12/ 12.23- System Assurance Submissions [2] Vol 2/ PS- Electrification/ CH14/ 14.5.13- System Assurance Submissions [3] Vol 3/ PS- Signalling/ CH7/ 7.2.4- System Assurance Submissions	In the reference clauses [1] from GS and [2]& [3] from PS are asking for the same documents to deliver. As Particular Specifications are superseding the GS requirements. Thus, the Contractor will submit the PS stated documents to eliminate the duplications. Please confirm	Bidder's understanding is correct
185	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.2.4	This System Assurance Plan will describe the RAM and Safety Assurance activities throughout the project lifecycle, comprising: (1) Preliminary Design (2) Detailed Design	The difference between point 2 & 3 i.e. Detail Design and Final Design is not clear. This is also contradicting with the "Plan development Stage" in Clause 12.23.1, as well.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
		(3) Final Design (4) Manufacturing and Production (5) Testing and Commissioning (6) Operation	Thus, as per Contractor understanding both are same, thus Contractor will follow the Plan development stage for the deliverables, as refer in Clause 12.23.1. Please confirm.	The Provisions of the bidding document shall prevail
186	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.3 & 12.4	COMPLIANCE MANAGEMENT & VERIFICATION & VALIDATION	The detail under the sections for Compliance Management and V&V are seems to be similar. Thus, bidder would like to understand, what are the Customer expectations to make these similar topics in two sections?	The provisions in the Bidding Document are self-explanatory and shall prevail
187	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.8.1	<b>(2) Construction and Installation Phase - The RAM activities shall include:</b> c. Preparation of Reliability, Maintainability and Availability Demonstration Plans	The mentioned point is contradicting with the preparations of RAM Demo Plan, with the clause 12.23 / Table S. No. 9.  Please confirm the correct phase to produce the RAM Demo Plan.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor. The Provisions of the bidding document shall prevail.
188	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.11.1	Point -8: Non chargeable failures in the RAM Demonstration are: (b) A failure occurrence in equipment of another subsystem, due to the <b>primary failure</b> .	Please define the primary failure as referred in the mentioned clause.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor. The Provisions of the bidding document shall prevail.
189	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.11.2	Point(2): In the event that the availability target is not achieved, the determination of availability achievement in the preceding six month period shall be continued at monthly intervals until the target is achieved.	Please define the start for the mentioned "Preceding Six month period".	The Provisions of the bidding document shall prevail.
190	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.11.3	Point (2) Maintainability Demonstration Test Plan (MDTP) shall be provided before the Final Design Review.	As Maintainability Demonstration Test Plan is not a part of deliverable list in GS & any PS. Thus, Bidder considered it as a part of RAM Demonstration Test Plan. Please confirm	The Provisions of the bidding document shall prevail.
191	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.13.1	Point (7) Classification of the incident (relevant independent failure or <b>dependent failure</b> );	Please define the dependent failure as referred in the mentioned clause.	The Provisions of the bidding document shall prevail.
192	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.16	Point (2) : The testing procedures shall ensure that all the critical failure modes as identified during the FMECA / FMEA activity <b>are addressed through proper test cases</b> inclusion. A traceability matrix shall be developed such that these critical failure modes are traced back to the	<ul style="list-style-type: none"> <li>• Please elaborate the expectation from the procedures to address failure mode through the test cases?</li> <li>• What are these test cases?</li> </ul>	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.

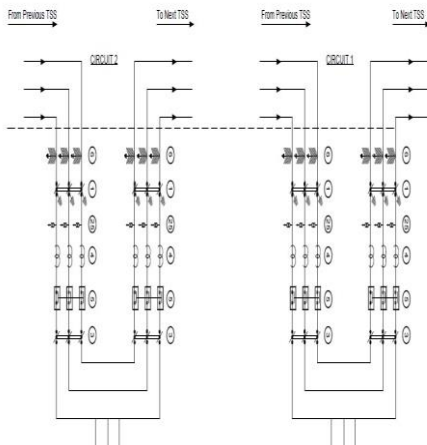
S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
		corresponding test cases. All failure modes shall be considered as critical failure modes unless the Contractor demonstrates by a sensitive analysis or other means that the impact of a failure mode on reliability and maintainability will be insignificant.	<ul style="list-style-type: none"> <li>What are the "Sensitive Analysis" and "other means", in the mentioned clause.</li> </ul> <p>As per Contractor understanding, it is not a component R&amp;D tender. Thus, the FMECA shall be performed on sub- system level as per the contractual requirements &amp; EN STANDARDS.</p>	The Provisions of the bidding document shall prevail
193	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.18.3	Point s: (3) System Operating Safety Plan; (4) System Operating Plan;	As per Contractor understanding the requirements from these two documents have been fulfilled in Safety plan and OSHA as per their system Particular specification; which covers the safety requirements towards operation. Please confirm.	The provisions in the Bidding Document shall prevail
194	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.19	12.19 "Proof of Safety"	As per our understanding the Operational Safety Case is a "Proof of safety ". Please confirm.	The Provisions of the bidding document shall prevail.
195	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.20	<b>SYSTEM ASSURANCE DURING TRIAL RUNNING</b>	System Assurance during Trial Run is Subject to the availability and performance of all the sub-system including Employers' input; other than CP-305. Please Confirm.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
196	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.20	<b>Point (3)</b> Evaluation of the effectiveness of system fault reporting, fall back systems, operating procedures and maintenance responses in the event of a number of system failures and degraded operating scenarios by simulating such scenarios during simulated revenue service.	Stimulated Revenue Service is Subject to the availability and performance of all the sub-system including Employers' input; other than CP-305. Please confirm.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
197	Part 2/ Section VI/ Volume-1/ GS/ CH 12	<b>12.21 SYSTEM ASSURANCE DURING REVENUE SERVICE RUNNING</b> <b>"The Contractor shall continue to implement system assurance activities during and after the transition to revenue service</b> including, but not limited to, the following requirements".	As per GC, Contract shall provide the warranty support during the DNP period. Thus, Contractor shall comply for the system assurance during the DNP. The GC requirement is contradicting with the mentioned Clause 12.16 of GS which is an open ended requirement.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
198	Part 2/ Section VI/ Volume-1/ PS/ CH 12/ 12.21.1	Point (1) Revenue Service shall not commence until the "Proof of Safety" has received the approval of the Employer.	As per our understanding, Delay in the Approval of the document shall not be attributed to the contractor. It is Employer's internal process. Please confirm.	Request not accepted. The provisions of the Bidding Document shall prevail.
199	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.23.1	Point 13: Operation Safety Case	As per Contractor understand and experience with EN standards the Operating Safety Case (OSC) will be delivered before the start of Operation service only.	Please refer addendum S.N 14 Addendum No. 08.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.							Query Raised	Employer's Response																		
(1)	(2)	(3)							(4)	(5)																		
		<table><tr><th rowspan="3">S No</th><th rowspan="3">Document Description</th><th colspan="5">Plan Development Stage</th><th rowspan="3">Remarks</th></tr><tr><th colspan="2">Design Stage</th><th rowspan="2">Manufacture/ Construction h/Installation</th><th rowspan="2">Testing/ Trial Run Stage</th><th rowspan="2">Warranty Stage</th></tr><tr><th>PRELIM</th><th>FINAL</th></tr><tr><td>13</td><td>Operational Safety Case</td><td>P</td><td></td><td></td><td></td><td>P</td><td></td><td>Second report shall be submitted within 7 days after the completion of safety validation test.</td></tr></table>	S No	Document Description	Plan Development Stage					Remarks	Design Stage		Manufacture/ Construction h/Installation	Testing/ Trial Run Stage	Warranty Stage	PRELIM	FINAL	13	Operational Safety Case	P				P		Second report shall be submitted within 7 days after the completion of safety validation test.	Why the Operating Safety Case has been asked to produce twice? Please confirm.	The OSC is to be prepared at preliminary design stage, based on preliminary design. It is to be updated at Testing/Trial Run stage incorporating all changes done during execution.
S No	Document Description	Plan Development Stage					Remarks																					
		Design Stage			Manufacture/ Construction h/Installation	Testing/ Trial Run Stage		Warranty Stage																				
		PRELIM	FINAL																									
13	Operational Safety Case	P				P		Second report shall be submitted within 7 days after the completion of safety validation test.																				
200	Part 2/ Section VI/ Volume-2/ PS/ CH 14	14.2 <u>Reliability Requirements</u> Point (4) Redundant equipment/module/component shall change seamlessly when active part fails. If changeover has a finite time, contractor shall show that its system shall not obstruct the train operation.  14.3 AVAILABILITY Point (10) Switchover between redundant equipment, or between redundant routings, shall occur automatically and immediately upon failure and shall be transparent to the users. Toggling in switchovers shall be prevented.							Referred both the clauses are contradicting and applicable differently to different systems. In Traction power supply system the changeover can be done with some finite time as mentioned in Point (4). But the Point 10 will be applicable to SCADA components only as they are electronic devices and TPS is electrical. Thus as per the Contractor understanding both the clauses shall be applicable as per the design of different sub-systems. Please confirm our understanding.	The provisions in the Bidding Document are self-explanatory and shall prevail																		
201	Part 2/ Section VI/ Volume-2/ PS/ CH 14	14.3 AVAILABILITY Point (14) Degraded performance or loss of any software or hardware dependent function of any end equipment shall be taken as unavailability.							The mentioned clause has been contradicting the concept of redundancy; where parallel equipment will come in picture during failure and system availability will sustain. Please confirm.	The provisions in the Bidding Document are self-explanatory and shall prevail																		
202	Part 2/ Section VI/ Volume-2/ PS/ CH 14	14.3 AVAILABILITY Point (19)/ iii The availability shall be worked out on the basis of the formula given during the preceding six months.....							What is the preceding six month in the mentioned clause? Please also mentioned form which KEY DATE this preceding six month will be applicable?	The provisions in the Bidding Document are self-explanatory and shall prevail																		
203	Part 2/ Section VI/ Volume-2/ PS/ CH 14	14.4 MAINTAINABILITY Point (4): Quantitative Maintainability assessments to all significant functional levels of the system, subsystems or equipment shall be allocated. Maintainability analyses during engineering, development and testing shall be used to evaluate the degree of achievement of the maintainability requirements. The Contractor shall identify the standards by which these allocations are made.							Contractor shall identify the Maintainability allocations from the returns of experiences and benchmarks from their past Experience. Please confirm.	The provisions in the Bidding Document are self-explanatory and shall prevail																		

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
204	Part 2/ Section VI/ Volume-2/ PS/ CH 14. 14.5.12	RAM Demonstration (iii) The requirements relating to Reliability and Availability shall be demonstrated throughout Trial Running Period	Reliability & Availability demonstration through Trial Run is subject to the availability and performance of all the sub-system including Employers' input; other than CP-305. Please Confirm.	The provisions in the Bidding Document are self-explanatory and shall prevail.
205	Part 2/ Section VI/ Volume-2/ PS/ CH 14. 14.5.13	Deliverable Documents Point 4- Safety Policy	Will the Safety Policy be the separate document or can be a part of Safety Plan? Please confirm.	The safety policy will be a separate document.
206	Part 2/ Section VI/ Volume-2/ PS/ CH 14	14.4: Maintainability Point (6): Built-in self-diagnostics, power-up self-test and sufficient test points shall be provided in the System to minimize the time required to locate a fault.	As per our understanding, in Relays are having the built-in self-diagnostics as per its functionality. Other components don't have such facility as per their functionality. Please confirm our understanding.	The provisions in the Bidding Document are self-explanatory and shall prevail.
207	Part 2/ Section VI/ Volume-2/ PS/ CH 14	14.4: Maintainability Point (7) All components, material, software and supports required for repair and servicing of the System shall be available during the entire lifetime of the System.	For the respective mentioned Clause, Client needs to develop service contract for entire lifetime of the system. Thus the requirement mentioned in the clause doesn't respect the Tender baseline. As per our understanding, for CP 305 Contractor shall be obliged to the requirement till the DLP as per contract Condition. Please confirm	The provisions in the Bidding Document are self-explanatory and shall prevail.
208	Part 2/ Section VI/ Vol 2/ PS- Electrification/ CH10/ 10.8.2	Availability Requirement: Point (b):-The availability figures for Traction Power functionality and the Traction power decision support system shall be 99.97%.	With Reference to the clause, what are the sub-systems of SCADA shall be considered under Traction Power Decision Support System?	The provisions in the Bidding Document are self-explanatory and shall prevail
209	Part 2/ Section VI/ Volume-1/ GS/ CH 12 /12.22	12.22 The Defect Liability /Notification shall be of minimum 24 Months from the date of Commercial operations and shall be monitored for RAMS compliance. The Failures and Performance shall be monitored on monthly basis and the result should meet the acceptable criterions. If the results of 6 months average do not meet RAM specifications than the DNP period shall be extended with full DNP obligations of the Contractors. The same may be extended with /without penalty for further period similarly.	Please clarify how the DNP will be extended	The provisions of the Bidding document are self-explanatory and shall prevail.
210	Part 2-Section VI- Vol-5 Particular Specifications E&M and Associated Works, clause no.	It may be noted that the roads within the TSS , SSP & SP ( including that for ATS provided if any) as required shall be bitumen concrete (BC) and constructed by Contractor CP-305 to permit transportation of all heavy equipment. The roads shall have minimum 5 meter wide	Please clarify whether road within the TSS,SP & SSP will be of Bitumen concrete or RCC.	The provisions of the Bidding document are self-explanatory and shall prevail.



S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	17.5.3 page 101 of 134	RCC road. Road construction shall be as per IRC standards.		
211	Part 2-Section VI-Vol-5 Particular Specifications E&M and Associated Works, clause no. 17.7.1 page 102 of 134	In Traction Substations (TSS), SP and SSP, the Contractor shall provide a road & rail system integrated with the transformer foundation to enable installation and the replacement of any failed unit by the spare unit located at the site. The Contractor shall take such rail and road system to the adjoining approach road for easy transport of the transformers and heavy equipment through rail/road transport.	We understand that foundation of equipment will be integrated with Rail cum road system with access to road for replacement of failed unit.	The provisions of the Bidding document are self-explanatory and shall prevail.
212	Part 2-Section VI-Vol-5 Particular Specifications E&M and Associated Works, clause no. 17.17.6 page 109 of 134	External finish of the Power Supply Control Room Building shall be attractive and pleasing to the eye preferably of stable and durable cladding of sandstone or equivalent of approved shade and design. The building shall have a good exterior finish as approved by the Engineer.	We propose External Finishing with cement plaster as proposed in bid for S&T buildings. Sand stone cladding is difficult to maintain and attracts gathering of dust.	The provisions of the Bidding document are self-explanatory and shall prevail.
213	Part 2-Section VI-Vol-5 Particular Specifications E&M and Associated Works, clause no. 4.5(5) page 1109 of 1271	(5) The Plinth level of Control room buildings like SSP, SP and TSS in proximity of Railway alignment shall be 900mm above natural ground level or 600mm above Highest Flood Level (HFL) whichever is higher.	We understand that adequate ROW for construction of control room buildings shall be provided including slope of 1 V: 2 H. Since coordinates of TSS,SP & SSP is not given and ROW is not known if Special any arrangement are required for slope retention shall be paid as additional item.	The provisions of the Bidding document are self-explanatory and shall prevail.
214	Part 2-Section VI-Vol-5 Particular Specifications E&M and Associated Works, clause no. 4.5(6) page 1109 of 1271	(6) The plinth level of Telecom Equipment Room in block section shall be at least 300 mm above the Rail level.	We understand that adequate ROW for construction of S&T buildings shall be provided including slope of 1 V: 2 H. Since coordinates will be finalized after details S&T design and ROW is not known if Special any arrangement are required for slope retention shall be paid as additional item. We also propose construction of these buildings at level of 900mm above natural ground level or 600mm above Highest Flood Level (HFL) whichever is higher.	The provisions of the Bidding document are self-explanatory and shall prevail.
215	Part 2-Section VI-Vol-5 Particular Specifications E&M and Associated Works, clause no.	The Contractor shall be responsible for land preparation, boundary wall, entrance gate, foundations, support anchor blocks, Fire / Baffle walls between transformers (as per the requirement identified in the Employer's requirement Volume - 2 PS for Railway Electrification and associated works), including architectural, civil structural, drainage,	We understand that construction of Ancillary buildings and fencing can be proposed to be constructed either Cast in situ buildings or Pre-manufactured buildings.	The provisions of the Bidding document are self-explanatory and shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response																						
(1)	(2)	(3)	(4)	(5)																						
	17.1 page 100 of 134	plumbing, and E&M services for the above buildings. All such parts and accessories shall be deemed to be within the scope of this specification whether specifically mentioned or not.																								
216	Schematic Diagram of 132/55kV traction substation		<p>In CP 305, The incoming GSS details/Name are not provided in RFP/Drawing. It is only mentioned as previous TSS and Next TSS. We presume that the incomers of TSS are as follows. Please confirm our understanding is correct. We require this critical information for conducting simulation study.</p> <table><tr><th>S. N. o.</th><th>TSS</th><th>Incomin g</th><th>TSS Name</th></tr><tr><td rowspan="2">1.</td><td rowspan="2">New Hapur TSS</td><td>Previou s TSS</td><td><b>WAIR TSS (CP 105)</b></td></tr><tr><td>Next TSS</td><td>New Sakoti TSS</td></tr><tr><td rowspan="2">2.</td><td rowspan="2">New Sakoti TSS</td><td>Previou s TSS</td><td>New Hapur TSS</td></tr><tr><td>Next TSS</td><td>New Telheri Buzurg TSS</td></tr><tr><td rowspan="2">3.</td><td rowspan="2">New Telheri Buzurg</td><td>Previou s TSS</td><td>New Sakoti TSS</td></tr><tr><td>Next TSS</td><td>Jagadh ari TSS (CP 304)</td></tr></table>	S. N. o.	TSS	Incomin g	TSS Name	1.	New Hapur TSS	Previou s TSS	<b>WAIR TSS (CP 105)</b>	Next TSS	New Sakoti TSS	2.	New Sakoti TSS	Previou s TSS	New Hapur TSS	Next TSS	New Telheri Buzurg TSS	3.	New Telheri Buzurg	Previou s TSS	New Sakoti TSS	Next TSS	Jagadh ari TSS (CP 304)	<p>Being a design &amp; build contract Functional Performance requirements have been specified. The detailed design is in the scope of the contractor.</p> <p>Data for details of the TSS (previous and next) shall be taken by the bidder after the site survey and interface in line with chapter 18 of the PS/Electrical, Vol 2 of the Bid Document.</p>
S. N. o.	TSS	Incomin g	TSS Name																							
1.	New Hapur TSS	Previou s TSS	<b>WAIR TSS (CP 105)</b>																							
		Next TSS	New Sakoti TSS																							
2.	New Sakoti TSS	Previou s TSS	New Hapur TSS																							
		Next TSS	New Telheri Buzurg TSS																							
3.	New Telheri Buzurg	Previou s TSS	New Sakoti TSS																							
		Next TSS	Jagadh ari TSS (CP 304)																							

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
217	FIDIC Conditions of Contract Clause 7.7 Ownership of Plant & Material	Each item of Plant and Materials shall, to the extent consistent with 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 entitled to payment of the value of the Plant and Materials under Sub-Clause 8.10 [Payment for Plant and Materials in Event of Suspension].	As employer is the owner of the material delivered to site, the same will be handed over to contractor for safe custody. For the movement of the material from one site to another for execution purpose, as per the GST Rules, it is mandatory to carry e-way bill. As the material in safe custody of contractor belongs to Employer, Eway bill to be issued by Employer.  Please confirm Employer will issue E-way bill for complying GST Rules	As per E-way Bill rules, the supplier of material (i.e. the contractor) who causes the movement of goods shall generate the E-way Bills. The Employer shall not issue any E-way Bills.
218	Part 2 / Section VI / Vol3/1.4.1(2)	Design and Implementation of Absolute Block Working with block instrument on the Main Line stretch from Khurja to Pilkhani and block proving by High Availability Single Section Digital Axle Counters.	This clause does not specify the block working arrangement necessary for connection between New Khurja Junction in CP 104 and New Khurja City in CP 305. Please clarify who has to consider this in the scope? If it is to be done by CP-305 contractor and what type of block working arrangement has to be considered?	Please refer S.N. 05 & 06 of Addendum no. 08.
219	Part 2 / Section VI / Volume 1 General Specifications / Clause No: 3.7.2 Page No. 218 of 1271	The simulation study may involve a number of iterations to optimize the Solution.	Since the Simulation Study is a time bound process and done by some international expert, number of iterations in the Study will lead to the delay in design. So, it has been suggested that the Simulation Scenario, boundary conditions and the output format will get approved from the Engineer before conducting the study. Kindly clarify.	Being a design & build contract General/ Functional/ Performance requirement have been specified. The detailed design is in the scope of the contractor. The provisions in the Bidding Document are self-explanatory and shall prevail.
220	Part -2 / Section VI / Volume 2 / Clause 3.3.4 / Particular Specification Page No. 449 of 1271	Proof Checking & Design Validation through an Independent agency as approved by the Engineer	We understand Proof Checking agency will only validate the detailed design prepared by the Contractor. Will the Proof Checking & Validation agency have to validate the Simulation result also? Will the same agency can do the Simulation & Proof Checking or is it required to be different. Please clarify.	The provisions in the Bidding Document are self-explanatory and shall prevail.
221	Part -2 / Section VI / Volume 2 / Clause 4.2 / Particular Specification Page No. 451 of 1271	Design Environment	Maximum solar gain of metallic object under the sun: 1kW /sq m. Solar Radiation Gain (both direct from the sun and the contribution first reflected by the earth: 120W/m2. Please clarify which value is required to be used to calculate the temperature rise of the conductor.	The Provisions of the Bidding Document shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response						
(1)	(2)	(3)	(4)	(5)						
222	Part -2 / Section VI / Volume 2 / Clause 5.1. 7 / Particular Specification Page No. 465 of 1271	First failure conditions (N-1) performance requirement – Under Failure of One TSS,the power will be extended from the adjacent TSS.	Kindly clarify the (N-1) failure scenario for New Hapur TSS of CP 305. We understand that under this scenario New Sakoti TSS shall extend the feed uptill New Hapur only & the feed for section between New Hapur & Khurja SP shall be extended either from CP 105 Wair TSS or CP 104 Ibrahimpur TSS.  Kindly clarify.	Please refer clause 5.1.5 (1&2) of Particular Specification (Electrical) Volume-2 of the Bidding Document.  The Provisions of the Bidding Document shall prevail.						
223	Part -2 / Section VI / Volume 2 / Clause 5.2.2 / Particular Specification Page No. 466 of 1271	<table><tr><th colspan="2">Table 5.2.2: Train Operation Plan</th></tr><tr><th>Train Consist</th><th>Headway/frequency</th></tr><tr><td>1. 1x9000kW/12000 HP electric locomotive plus 63 BOXN wagons (100T each) 2. All trains shall be fully loaded. 3. A mix of normal Train and long haul train in the ratio of 2:1 <b>shall be considered for both UP &amp; DN directions.</b> 4. For 6500T – 2 train (Normal) For 13000T – 1 train (Long haul) 5. Train stoppage – At alternate Stations for crossing or any other reasons etc.</td><td>Headway 17 Min</td></tr></table>	Table 5.2.2: Train Operation Plan		Train Consist	Headway/frequency	1. 1x9000kW/12000 HP electric locomotive plus 63 BOXN wagons (100T each) 2. All trains shall be fully loaded. 3. A mix of normal Train and long haul train in the ratio of 2:1 <b>shall be considered for both UP &amp; DN directions.</b> 4. For 6500T – 2 train (Normal) For 13000T – 1 train (Long haul) 5. Train stoppage – At alternate Stations for crossing or any other reasons etc.	Headway 17 Min	The given train operation plan is unclear. Considering the given conditions, the input boundary conditions are as follows. 1) Route – Single Line Section 2) Headway – 17 mins 3) Train Mix – SSDSSD.. operating from both directions (UP & DOWN)  With above condition, it is not feasible to have train operation plan with train running from both directions (UP & DOWN). This issue was clarified in CP 304 tender. Therefore, we request DFCCIL to furnish a workable Train Operation Plan similar to that of CP 304 with section wise total number of trains/day. Also confirm that the train mix shall be SSDSSD.. (S- Single, D-Double) with 33% trains as empty and stoppage of trains only for crossing purposes. We wish to reiterate, clarity on the Train Operation Plan at the bid stage is very critical as any change in the Train Operation Plan during execution stage may lead to severe variations in the Transformer ratings, conductor sizes, number of Paralleling Posts, additional positive feeder requirement, etc.	Please refer S.N. 02 of Addendum no. 08.
Table 5.2.2: Train Operation Plan										
Train Consist	Headway/frequency									
1. 1x9000kW/12000 HP electric locomotive plus 63 BOXN wagons (100T each) 2. All trains shall be fully loaded. 3. A mix of normal Train and long haul train in the ratio of 2:1 <b>shall be considered for both UP &amp; DN directions.</b> 4. For 6500T – 2 train (Normal) For 13000T – 1 train (Long haul) 5. Train stoppage – At alternate Stations for crossing or any other reasons etc.	Headway 17 Min									
224	Part -2 / Section VI / Volume 2 / Clause 6.1.3 / Particular Specification Page No. 469 of 1271	Traction Substation	We understand that 132KV LILO Arrangement is available for all the three Traction Sub Station – 1. New Hapur TSS (without Spare Transformer) 2. New Sakoti TSS (with Spare Transformer) 3. New Telheri Buzurg (without Spare Transformer) Kindly Confirm our understanding.	The Provisions of the Bidding Document shall prevail.						

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.		Query Raised	Employer's Response									
(1)	(2)	(3)		(4)	(5)									
				Also, proposed plot size provided is 140X85 sq. m. Reference drawing as provided in the Tender has been proposed for the Scott Connected transformer only. It may be difficult to allocate the TSS with V connected transformer within the plot size as proposed in the tender. We request you to allocate the extra land requirement to construct the TSS if required.										
225	Part -2 / Section VI / Volume 2 / Clause 6.1.3 / Particular Specification Page No. 470 of 1271	Traction Substations (TSSs): Auto transformers (as required by design); Standby Auto transformer is to be provided which can be connected to either side of the Neutral Section in case of failure of the existing Auto transformer		Contract condition calls for the V-connected transformer also. If V-connected transformer with center tapping is used, it may eliminate the Auto transformer at TSS. Will AT at TSS is mandatory to be installed or it will depends on the outcome of the Simulation study. Please confirm.	Being a design & build contract General/Functional/Performance requirements have been specified. The detailed design is in the scope of the contractor.  The provisions of the Bidding Document shall prevail.									
226	Part -2 / Section VI / Volume 2 / Clause 6.1.4 / Particular Specification Page No. 470 of 1271	Sub Section Posts (SSP)		The typical schematic shows Two numbers of Auto Transformer at SSPs. As this is a single line section only one AT is required.  Kindly clarify whether the contractor CP305 needs to provide two ATs at SSP.	Please refer, clause 6.1.4 (4) of Part 2, Section VI, Volume 2. Also, please refer Schematic Diagram of Sub Sectioning Post (SSP) in Part-4 of the Bidding document.									
227	Part -2 / Section VI / Volume 2 / Clause 6.1.5 / Particular Specification Page No. 471 of 1271	Sectioning Post (SP)		The typical schematic shows Four numbers of Auto Transformer at SPs. As this is a single line section only Two ATs are required.  Kindly clarify whether the contractor CP305 needs to provide four ATs at SP	Please refer, clause 6.1.5 (4) of Part 2, Section VI, Volume 2.  Also please refer Schematic Diagram of Sectioning Post (SP) in Part-4 of the Bidding document.									
228	Part -2 / Section VI / Volume 2 / Clause 6.3.1 / Particular Specification Page No. 474 of 1271	Table 6.3.1 Maximum Earth Resistance <table><tr><td rowspan="2">Location</td><td>Earth resistance (ohms)</td></tr><tr><td>Total Earth system</td></tr><tr><td>TSS</td><td>0.5</td></tr><tr><td>SSP</td><td>0.5</td></tr><tr><td>SP</td><td>0.5</td></tr></table>		Location	Earth resistance (ohms)	Total Earth system	TSS	0.5	SSP	0.5	SP	0.5	Maximum earth resistance for SP and SSP is specified as 0.5 ohms in Vol.II, Table 6.3.1. We would request to revise it to 2.0 ohms as per the Indian Railways Manual of AC Traction, Volume II, Part II, Para.5.  Please confirm that the maximum earth resistance for SP & SSP as well shall be acceptable within 2.0 ohms as per Indian Railway standards.	The provisions of the Bidding Document shall prevail.
Location	Earth resistance (ohms)													
	Total Earth system													
TSS	0.5													
SSP	0.5													
SP	0.5													

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.		Query Raised	Employer's Response
(1)	(2)	(3)		(4)	(5)
		Other Locations	To meet the requirements of EN50122-1	Kindly note that the value of Earth resistance has been revised to 2.0 ohms for SP and SSP locations in other DFCC E&M tenders.	
229	Part -2 / Section VI / Volume 2 / Table 7.1.1 / Particular Specification Page No. 486 of 1271	List of Proposed Traction Sub Station (TSS)		The Approx. DFCC Chainage provided doesn't match with the Chainage provided in Addendum issued for CP 304. Request you to provide the correct chainage of all TSS.	Please refer S.N. 03 & 04 of Addendum no. 08.
230	Part -2 / Section VI / Volume 2 / Table 7.1.3 / Particular Specification Page No. 486 of 1271	List of Proposed Sub Sectioning Post (SSP)		The Approx. DFCC Chainage provided doesn't match with the Chainage provided in Addendum issued for CP 304. Request you to provide the correct chainage of all SSP.	Please refer SN- 03 of Addendum no. 08.
231	Part 2 / Section VI / Volume 2 / Particular Specifications / 13.2 CONTRACT SPARES / Table 13.2.1 Page No. 570 of 1271	6. Aerial Earth Wire and BEC		Since installation of BEC will be the outcome of Simulation Study, Kindly clarify if the study eliminates BEC, then also is it required to be provided.	The provisions of the Bidding Document shall prevail.  If the proposed design of Earthing and bonding system without BEC fulfils the requirement of relevant standards and safety norms, the Engineer will decide accordingly. Please refer S.N. 25 of Addendum no. 8.
232	Part 2 / Section VI / Volume 2 / Particular Specifications / Table 7.1.4/ Page No. 487 of 1271	List of Proposed TSS , SP & SSP up to Next TSS of Sahnewal – Pilkhani Section (CP 304)		The Chainage Provided in the document does not match the chainages given in Addendum of CP 304. Request you to kindly provide the modified / Correct Chainage	Please refer S.N. 04 of Addendum no. 08.
233	Part 2 / Section VI / Volume 2 / Particular Specifications /	Rated secondary voltage: 55kV/ 2x27kV		We understand it should be 55kV/ 2x27.5 kV. Please confirm.	Yes, the bidder's understanding is correct.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	Table 7.3.2 / Page No. 488 of 1271			
234	Part 2 / Section VI / Volume 2 / Particular Specifications / Clause 7.4.4 / Page No. 491 of 1271	The Auto transformer capacity as indicated as above is minimum for inter-distance of 10 - 20 km between TSS and SSP or SSP and SP.	V-connected transformer can eliminate the Auto Transformer at TSS. In that case, the distance between AT will not be maintained 10-20 kms. Is it mandatory to keep AT between 10-20 kms or it will be the outcome of the Simulation Study? Please confirm.	Being a design & build contract General/Functional/Performance requirements have been specified. The detailed design is in the scope of the contractor.  Please refer to sub – clause 3.3.1(1)(v)(d), vol. 2, part 2 of the bidding document
235	Part 2 / Section VI / Volume 2 / Particular Specifications / Clause No. 8.14 / Page No. 507 of 1271	Structure/Uprights and their Foundations	Whether exposure of Foundation is allowed after maintaining the specified distance between center line of track and edge of foundation as per SOD. If exposure is allowed, then the permissible length provided shall be 400mm above ground level. Kindly confirm.	Being a design & build contract General/Functional/Performance requirements have been specified. The detailed design is in the scope of the contractor.  The provisions of the Bidding Document shall prevail.
236	Part – 4 Reference Documents	Electrical Drawings–GC/DFCC/PS/GSD/305	Please provide the revised General Power Supply Diagram.	Please refer S.N. 12 of Addendum no. 08.
237	General	Details and Drawings of FOB, RUB, ROB, major and minor bridges.	Kindly provide us the details of FOB, RUB, ROB and major and minor bridges details for effective design review.	Refer Alignment Plans in part 4, reference document
238	General		Kindly confirm if one V-type traction transformer fails in one TSS, can we use the second transformer to provide power to the feeding zone between two SPs as per sound design practice used on 2x25 kV electrification projects overseas? We understand that this is better than extending the feeding zone from an adjacent TSS since train performance will be reduced as per EN 50388.	Being a design & build contract General/Functional/Performance requirements have been specified. The detailed design is in the scope of the contractor.  The provisions of the Bidding Document shall prevail
239	General		Kindly confirm if one V-type traction transformer fails in one TSS, can we use the OFAF rating of the second transformer in the same TSS (or the OFAF rating of one transformer in the adjacent TSS) to provide power to the corresponding feeding zone on a <u>continuous</u> basis?	Being a design & build contract General/Functional/Performance requirements have been specified. The detailed design is in the scope of the contractor.  The provisions of the Bidding Document shall prevail

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
240	General		Kindly confirm whether bidder can provide two V-type traction transformers <u>in all TSS</u> with sufficient "spare capacity" to provide power to the corresponding feeding zone under outage conditions of one transformer in the same TSS or outage of an entire TSS? If this is acceptable, we can offer to use the ONAF rating of the transformer in lieu of the OFAF rating. We believe that this solution is better than providing 3 transformers in alternate TSS, since DFCC will not benefit from the spare transformer in case of outage of one transformer in the adjacent TSS where only 2 transformers are provided? We note that the philosophy adopted on all 2x25 kV electrical projects overseas is to provide two traction transformers with sufficient spare capacity at all TSS.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor. The Provisions of the Bidding Document shall prevail.
241	Part 2 / Section VI / Volume 3 / Clause 2.2.3 – (2) system requirements (c). Page No. 763 of 1271	Wherever interlocking equipment (Central Interlocking Unit or Object Controller) is located, a display shall be available showing the state of the railway under control by that interlocking. The display shall be provided in all the Signalling Equipment Rooms at Stations where Interlocking Equipment (Central Interlocking Unit or Object Controller) is located. While the display at all interlocking Equipment (Central Interlocking Unit or Object Controller) will cover only area under control of that interlocking, the display at Station interlocking shall cover area up to the next (adjacent) stations on both either sides.	For the display unit, whether we can consider MTC (networking) at every location of interlocking equipment or TMS display unit to be considered.  Kindly clarify.	Provisions of Bidding document are sufficiently clear.  Being a Design build contract, the design shall be proposed by the Contractor and approved by the Engineer at design stage after award of contract.
242	Part 2 / Section VI / Volume 3 / Clause 2.2.4 – (1) system requirement (a). Page No. 764 of 1271	For reasons of operational availability, a distributed control capability is required on the section.	Is it a centralized operation with distributed architecture or we need to control the yard from different locations. Kindly clarify.	Under this Clause, the control of the yard can be from different locations. Also refer Clause No. 2.1.4 of PS / Signalling Works.
243	Part 2 / Section VI / Volume 2 / Particular Specifications/ Clause No. 4.4.2 (2) Page No. 453 of 1271	The System, including all Sub-systems and Equipment shall generally be of approved RDSO / CORE design / specifications, wherever applicable.	Kindly allow for the procurement of materials from PGCIL/SEB approved vendor when the material is not covered by RDSO/CORE.	The provisions in the Bidding Document are self-explanatory & shall prevail.



S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
244	Part 2 / Section VI / Volume 2 / Particular Specifications/ Clause No. 8.2.1 Page No. 497 of 1271	Track Structure and formation: The Contractor shall design the OHE & Traction Return Supply system considering the Track formation Data. Track Formation shall be constructed by CST contractor CP 303 as per RDSO guidelines no. RDSO/2007/GE: 0014 for 32.5Tonne Axle load. The soil properties mentioned therein shall be considered by the contractor (CP 305) for design including the improvement in Soil conductivity needed if any at their own cost.	Kindly confirm the soil to be used for embankment and their Soil bearing capacity.	Please refer to Sr.no 9 sub-clause 1.3.4, Vol-1, Part-2 of the Bidding Document at page 193 -194 of 1271. The provisions in the Bidding Document are self-explanatory and shall prevail.
245	Part 2 / Section VI / Volume 2 / Particular Specifications/ Clause No. 8.4.3 (b) Page No. 502 of 1271	The contact wire shall be continuous, i.e. splicing or jointing of the conductors is not permitted between terminations or between cut-in insulators. Splices are primarily used during maintenance and shall not be used in the contact wire and /or catenary wire by way of installation or repair unless approved by the Engineer.	Thefts are common in lengthy section. Restrictions on "Splice not acceptable in new installation" should be relaxed. Request you to amend the tender clauses accordingly.	The provisions in the Bidding Document are self-explanatory & shall prevail.
246	Part-2 / Section VI / Volume-3 / Clause 2.2.6 - (2)-(e) page no. 770 of 1271	(e) Separate power supply for IR and DFC shall be provided at all LC gates. Power supply shall be separate for IR and DFC equipment for maintainability. To achieve this, two separate IPS systems shall be supplied and installed. Construction of Signalling Equipment Room and Signalling Power Supply Equipment Room for DFC are in the scope of present contract.	Separate IPS is provided for LC gates of IR and DFCC in Block Section. Whether Separate IPS is required for LC gates of IR in Station Section also. Please Confirm.	Provisions of Bidding document are sufficiently clear.
247	Part 2, Section VI, Volume 5 Particular Specifications / Clause No: 4.2.2 - (1) (e); Page No. 1102 of 1271	Each Auxiliary Power Sub-station shall have One step down transformer of adequate capacity. The Contractor shall consider Capacity of the 11kV/0.433 kV Transformer and other power equipment suitable to meet the power requirement with minimum 20% future load requirement. The transformer rating for all the stations shall be maximum of two types only. The contractor shall provide at least one transformer of each rating / capacity as spare. If there is same rating/capacity distribution transformer at all the Auxiliary Power sub-stations, the spare shall not be less than two nos.	Please provide Transformer loading details for auxiliary transformer including 20% for future loading.  Also provide permissible transformer losses.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor. The Provisions of the Bidding Document shall prevail. Please refer Sub Clause 5.3(4), Vol-5, Part-2 of the Bidding Document.
248	Part 2 / Section VI / Volume 5 Particular Specifications / Clause No: 6.2.15 - 1 (C) Page No. 1129 of 1271	The distribution boards shall serve the distribution of electrical power to lighting system, socket outlets, machinery/motors, etc. The loads shall be connected either directly to these boards or via sub-distribution boards.	The No. of points to be considered per circuit is not mentioned. Kindly provide the required information.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
				<p>The number of points per circuit shall be as per Clause 8.5(5) at page 1143 of 1271.</p> <p>The Provisions of the Bidding Document shall prevail.</p>
249	Part 2 / Section VI / Volume 5 Particular Specifications / Clause No: 15.1 - (3) Page No. 1173 of 1271	In addition to the above, 10 Nos. of Air conditioners of 1.5 T capacity shall be provided at IMD's at location to be decided by the Engineer.	<p>The air conditioners to be provided shall be of Split type or VRV type.</p> <p>Kindly clarify.</p>	<p>Being a design &amp; build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.</p> <p>The Provisions of the Bidding Document shall prevail.</p>
250	Part 2 / Section VI / Volume 5 Particular Specifications / Clause No: 15.3.3 Page No. 1174 of 1271	The contractor shall provide the requisite capacity air-conditioning system to achieve the Room temperature of 21 +/- 2 Degree Celsius at highest climatic/ ambient conditions.	<p>As per ASHRAE 62.1, normal room temperature considered is 24 degree C (+/- 1).</p> <p>Kindly clarify</p>	The provisions in the Bidding Document are self-explanatory and shall prevail.
251	Part 2 / Section VI / Volume 5 Particular Specifications / Clause No. 17.6.2 Page No. 1186 of 1271	Drainage of the Substation site shall be provided as per the best engineering practices, so as to prevent surface flooding and pooling of water. For this purpose, suitably designed drains and sumps shall be provided and if the water level inside the sump rises above a predetermined level, the sump water shall be arranged to be evacuated by means of suitable automatic electric pumps fixed in the sump.	Kindly share the Data for High flood level at TSS; SSP; SP and Parallel alignment & Detour alignment area with respect to Existing ground level.	This is in the scope of contractor to collect the data from Irrigation Department of State Government/CST Contractor.
252	Part-2 / Section VI / Volume-1 / Clause: 2.16.5 (1) Page No. 210 of 1271	Class B1: Equipment Rooms with air-conditioning with possibility of failure of air-conditioning for duration of 2 hours or more at a time.	Kindly specify the upper limit on duration of failure of air-conditioning equipment.	Provisions of Bidding document shall prevail.
253	Part-2 / Section VI / Volume-1 / Clause: 2.16.5 (2) Page No. 211 of 1271	Requirements for Class A: Temperature Min 5°C to Max 35°C, Humidity Minimum 0%, Nominal 65%, Maximum 95% (Non Condensing)	Typically Telecom and IT infrastructure rooms are air-conditioned such that humidity is well maintained much below the specified 95%. IT equipment being installed in Equipment room typically support 80% humidity. Hence, we kindly request you to reduce the 95% Humidity limit clause to 80% Non-Condensing.	Provisions of Bidding document shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
254	Part-2 / Section VI / Volume-1 / Clause: 2.16.5 (2) Page No. 211 of 1271	Requirements for Class B1: Temperature Min -2.5°C to Max 45°C, Humidity Maximum 100% (Non Condensing)	Class B1 is defined as Air-conditioned Telecom Equipment Room. Hence, Humidity in the equipment room is well controlled. In addition, none of the Telecom and Switching equipment meant for deployment in Indoor Telecom Equipment Room support 100% Humidity (meant for Outdoor or Buried environment – Class-C and Class-D respectively). Hence, we kindly request you to reduce the Maximum Humidity requirement to 90% Non-Condensing for Air-conditioned rooms.	Provisions of Bidding document shall prevail.
255	Part-2 / Section VI / Volume-3 / Clause: 5.2.2 (2) Page No. 833 of 1271	Construction of Signalling Equipment rooms and Signalling Power Supply equipment rooms in the block section and at LC gates for DFC, is within the scope of present contract and their number and location will be determined by signalling design and consequent requirements and as approved by the engineer. These Signalling Structures shall be located to the extent possible near the Railway Level Crossings. The Signalling power supply equipment rooms can be combined with the telecommunication power supply room where they are co-located. The Contractor shall provide the ventilation of these rooms in accordance with relevant provisions of this specification.	We understand that construction material is up to the contractor to decide (RCC or Porta with thermal insulation). Please Confirm.	Provisions of the Bidding Document are sufficiently clear.  Please refer para 17.13 of Part 2, Section VI, Volume 5 (Particular Specifications – E&M and Associated Works)
256	Part-2 / Section VI / Volume-3 / Clause: 5.2.2 (5) Page No. 833 of 1271	Opening/Closure of signalling Equipment rooms/Power supply Room at the station and in the block sections shall be Recorded in Data logger & indicated on the SM's dat the OCC.	We understand that supply of Data Logger in not under contractor's scope. Please Confirm.	Bidders' understanding is not correct. Supply of Data Logger is in the scope of Contract.
257	Part-1 / Section IV / Bidding forms / Clause: 2.3.4.3 Page No. 172 of 1271	Supply of Cab Radio complete with power supply, battery pack, antenna, software & accessories	No spares are to be provided as a part of Cab Radio Supply. Please confirm.	Kindly refer response to query at S.No. 157.
258	Part-2 / Section VI / Volume-4 / Clause: 1.3.1.3 Page No. 936 of 1271	The scope shall include supply and installation of towers and BTSs in section of Khurja - Pilkhani Section to provide complete MTRC system as defined in this Particular Specification.	Khurja – Pilkhani section includes parallel length of 107km & 03 detours of length 118km approx. Kindly confirm if supply & installation of towers and BTSs is to be done for whole section or only in detour section	Supply & installation of towers and BTSs is to be done for whole section.
259	Part-2 / Section VI / Volume-4 / Clause: 3.1.6	Wherever the equipment, being provided under Contract Packages CP-104, CP-105, CP-203 and CP-304 for EDFC are upgraded/augmented/reconfigured under this	we understand that clause related to service life is applicable only for upgraded/augment Hardware part or	Kindly refer response to query at S.No. 126.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	Page No. 945 of 1271	Contract, the service life of these upgraded/augmented/reconfigured equipment shall be minimum 15 years from date of commissioning of this upgradation/augmentation /reconfiguration.	Software only and not applicable for whole equipment. Please confirm.	
260	Part-2 / Section VI / Volume-4 / Clause: 4.6.2 Page No. 952 of 1271	Unless otherwise specified, all indoor Telecommunication Equipment installations shall be designed for operation continuously in environmental temperatures range of -5°C to +55°C.	Typically Telecom servers and PCs are installed in air-conditioned environment and supports temperature range from 0oC to +40°C. IT equipment (Servers etc.) operates at +35°C. We kindly request you to modify the temperatures range to 0oC to +40°C for Indoor equipment.	Kindly refer response to query at S.No. 127.
261	Part-2 / Section VI / Volume-4 / Clause: 5.3.3.3 Page No. 954 of 1271	The Second Network shall carry all Voice (including Emergency Communication) and Data (including Traction Power SCADA) Communication between Stations and LC Gates, GSM-R Locations, TSSs, SPs, SSPs, IMD, IMSDs, Staff Quarters etc. Second Network shall also carry all Signal Control Information, Track Vacancy Detection Information and other Vital & Safety Related Information between Stations, LC Gates This shall be formed by two optical fibre cables 24F (min), laid on either side of the track ensuring route diversity, from Khurja to Pilkhani and terminated on ODFs in TERs at Stations, GSM-R Locations, TSSs, SPs, SSPs, IMDs, IMSDs, LC Gates, Staff Quarters and any other location as required. Based upon design, locations of termination of optical fibre cables of Second Network can be clubbed with other Systems/Sub-systems under this Contract while meeting overall Telecommunication Requirements.	We understand that the OFC doesn't have to be terminated at all Staff Quarter locations and it may be terminated as per the actual requirement. Kindly confirm. Also, please confirm whether all Second Network locations where OFC is terminated need to be equipped with SDH or not.	Kindly refer response to query at S.No. 128.
262	Part-2 / Section VI / Volume-4 / Clause: 5.3.3.4 Page no. 954 of 1271	In addition to SDH Network, optical fibres shall also be used for Data Networking System, as stipulated in Chapter-6 and Signaling Systems, as required.	We understand that the Fibers may be used for SCADA or other intra-Telecom usage also. Please confirm.	Provisions of Bidding Document are sufficiently clear. Please refer clause 5.3.4.3 of PS Telecom.
263	Part-2 / Section VI / Volume-4 / Clause: 5.3.3.5 Page no. 954 of 1271	At least 25% of fibres within each cable shall be reserved as spares for future use.	We understand that fibres except the spare portion (i.e. 25%) can be used for intra-Telecom usage. Please confirm.	Kindly refer response to query at S.No. 129.
264	Part-2 / Section VI / Volume-4 / Clause: 5.3.4.3	The Second Network shall carry all Voice (including Emergency Communication) and Data (including Traction Power SCADA) Communication between Stations and LC Gates, GSM-R Locations, TSSs, SPs, SSPs, IMD, IMSDs,	We request you to clarify the scope of Telecom works at: 1.LC Gate 2.Staff Quarters	Provisions of Bidding Document are sufficiently clear.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	Page no. 955 of 1271	Staff Quarters etc. It shall also carry all Signal Control Information, Track Vacancy Detection Information and other Vital& Safety Related Information between Stations, LC Gates.	Also, please clarify Is VSS data to be carried over SDH? Is it necessary that Traction Power SCADA data is carried over SDH? Please Confirm	
265	Part-2 / Section VI / Volume-4 / Clause: 5.3.4.5 Page no. 955 of 1271	For providing connectivity between Khurja - Pilkhani section with Khurja - Bhaupur section (CP-104), STM - 16 nodes provided by the contractor at New Khurja station shall be integrated with the existing STM-16 provided by CP-104 at New Khurja station.	Please clarify if it is necessary to provide the STM-16 Node at New Khurja in addition to STM16 node of CP104. Instead it may be possible to extend the connectivity over Optical fiber link from nearest STM16 node (New Maman)	Provisions of Bidding Document are sufficiently clear.
266	Part-2 / Section VI / Volume-4 / Clause: 5.3.4.5 Page no. 955 of 1271	For providing connectivity between Khurja - Pilkhani section with Sahnewal – Pilkhani section (CP-304), STM -16 nodes provided by the contractor at New Pilkhani station shall be integrated with the existing STM-16 provided by CP-304 at New Pilkhani station.	Please clarify if it is necessary to provide the STM-16 Node at New Pilkhani in addition to STM16 node of CP304. Instead it may be possible to extend the connectivity over Optical fiber link from nearest STM16 node	Provisions of Bidding Document are sufficiently clear.
267	Part-2 / Section VI / Volume-4 / Clause: 5.3.5.6 Page no. 956 of 1271	Flexible Access Multiplexer or Primary Order Multiplexer shall have minimum 50% spares for all types of Channel Circuits (Minimum 1 for all types of Channel Circuits).	Kindly clarify the meaning of 50% spares for all types of channels – whether the contractor required to provide 50% spare channels between nodes at the backhaul link.	Kindly refer response to query at S.No. 130.
268	Part-2 / Section VI / Volume-4 / Clause: 5.3.5.9 Page no. 956 of 1271	Ethernet Connections for each application need to be implemented through Ethernet Virtual Private Line Service.	Please confirm if the same can be done through EVPL/EPL/ELAN.	Provisions of Bidding document shall prevail.
269	Part-2 / Section VI / Volume-4 / Clause: 5.3.9.13 (2) Page no. 960 of 1271	The NMS shall allow the user to configure all existing and new circuits with the following functions: (h) the OFC links from junction stations to the adjacent station of IR	SDH NMS cannot monitor the OFC links from junction stations to the adjacent station of IR unless there is an SDH connectivity established. Also, there is no Junction Station in Khurja – Pilkhani stretch. Kindly clarify the type of monitoring required.	Kindly refer response to query at S.No. 131.
270	Part-2 / Section VI / Volume-4 / Clause: 5.3.9.13 (2) Page no. 960 of 1271	The NMS shall allow the user to configure all existing and new circuits with the following functions: (a) frame position allocation (b) interface port allocation; (c) low speed (64 kbps & lower) interface cards configuration; (d) lower order multiplex time slot allocation and routing; (e) higher order multiplex/cross-connect switch configuration;	Most of these features correspond to NMS of an SDH equipment.  Kindly clarify whether all of these configuration also apply to NMS of Flexible Access Multiplexer.	Only applicable functions shall apply to NMS of Flexible Access multiplexer while designing the Telecom System.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
		(f) logging of circuit routing data logged into configuration database; (g) operator's configuration checks function prior to main and backup database update; (h) the OFC links from junction stations to the adjacent station of IR		
271	Part-2 / Section VI / Volume-4 / Clause: 5.5.3.3 (1) Page no. 963 of 1271	Flexible Access Multiplex Equipment shall conform to ITU-T Rec. G.703, G.704, G.706, G.707, G.708, G.709, G.711, G.732 and G.823.	Kindly note that ITU-T G.707, ITU-T G.708 and ITU-T G.709 are applicable to SDH equipment. Hence, they may please be removed as requirement from Flexible Access Multiplex Equipment.	Only applicable standards shall be used for Flexible Access multiplexer while designing the Telecom System.
272	Part-2 / Section VI / Volume-4 / Clause: 5.5.3.3 (6) Page no. 964 of 1271	Adequate numbers of Primary Multiplexers shall be provided so that there is no loss of Communication at any point of time.	Normally, loss of communication is prevented by building Controller card and Power supply redundancy in the equipment. Kindly clarify how "Adequate number of Primary Multiplexers" shall be computed.	Being a Design build contract, the design shall be proposed by the Contractor and approved by the Engineer at design stage after award of contract.
273	Part-2 / Section VI / Volume-4 / Clause: 5.5.3.3 (8) Page no. 964 of 1271	The optical line interfaces shall conform to ITU-T Rec. G.957	The Flexible Access Multiplexer is required to interface with SDH equipment at E1 level (Electrical interface). Similarly, it is required to provide sub-2Mbps interfaces (Voice interfaces, RS232, etc.). All of these are Electrical interfaces. Hence, there is no requirement for Optical Interfaces and requirement for ITU-T G.957 is not relevant. Kindly clarify under what circumstances, this standard will be applicable for Flexible Access Multiplexer.	Only applicable standards shall be used for Flexible Access multiplexer while designing the Telecom System.
274	Part-2 / Section VI / Volume-4 / Clause: 5.5.3.3 (7) Page no. 964 of 1271	Flexible access multiplexer equipment shall be provided with 1+1 protection for all channel levels (VF, Data, etc.) with automatic switch over in case of fault.	Kindly confirm that "1+1 protection for all channel level (VF, Data, etc.) with Automatic Switchover" corresponds to SNCP equivalent functionality at the E1 backhaul link; as ITU-T Rec G.704 defines 'channel' as '64kbps time slot of E1'.	Provisions of Bidding Document are sufficiently clear.  Please refer Clause 5.3.7.7 of PS / Telecommunication Works, Part 2, Section VI, Vol.4
275	Part-2 / Section VI / Volume-4 / Clause: 6.3.1 Page no. 967 of 1271	WAN shall be created using Layer-3 Switches equipped with minimum 4 Nos. 10GigE Fibre Ports for backbone interconnections. WAN shall connect OCC, Stations, Khurja station, Pilkhani Station, IMD and IMSDs, in Ring Topology using Optic Fibre Cable. Further WAN shall connect TSSs with nearest stations in Redundant Linear Topology using Optic Fibre Cable. Locations of Layer-3 Switches can be clubbed based upon design of other	It is possible to extend the WAN to IMD, IMSD and TSS by means of Layer-2 Switches placed at IMD, IMSD and TSS locations and connecting them to the Layer-3 Switches at nearby Station by means of Second Network Optical Fibre Cable. We understand that it is allowed to extend WAN to IMD, IMSD and TSS locations in this manner and it is not mandatory to provide Layer-3 switches at TSS and IMSD. Kindly confirm the same.	Kindly refer response to query at S.No. 135.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
		Systems/Subsystems under this Contract while meeting overall Packet Data Communication Requirements.		
276	Part-2 / Section VI / Volume-4 / Clause: 6.3.2 Page no. 967 of 1271	Layer-3 Switches at New Pilkhani station under CP-305 shall be integrated with Layer-3 Switches being provided at New Pilkhani station under Contract Package CP-304 for Sahnewal - Pilkhani using 10GigE Fibre Ports with 1+1 Protection.	Please clarify if it is necessary to provide the Layer-3 Switches at New Pilkhani in addition to Layer-3 Switches of CP304. Instead it may be possible to extend the connectivity over Optical fiber link from nearest station/IMSD Layer-3 Switches. Please confirm	Provisions of Bidding Document are sufficiently clear and shall prevail.
277	Part-2 / Section VI / Volume-4 / Clause: 6.3.3 Page no. 967 of 1271	Layer-3 Switches at New Khurja station under CP-305 shall be integrated with Layer-3 Switches being provided at New Khurja station under Contract Package CP-104 for Sahnewal - Pilkhani using 10GigE Fibre Ports with 1+1 Protection	Please clarify if it is necessary to provide the Layer-3 Switches at New Khurja in addition to Layer-3 Switches of CP104. Instead it may be possible to extend the connectivity over Optical fiber link from nearest station/IMSD (New Maman) Layer-3 Switches. Please confirm	Provisions of Bidding Document are sufficiently clear and shall prevail.
278	Part-2 / Section VI / Volume-4 / Clause: 6.3.4 Page no. 967 of 1271	Layer-3 Switches at OCC shall be integrated with Layer-3 Switches at OCC being provided under Contract Packages CP-104, CP-105, CP-203 & CP-304 using 10GigE Fibre Ports with 1+1 Protection.	Our understanding is DNS traffic of CP305 will be carried to OCC through WAN being provided under Contract Packages CP-104, CP-203. Integration will be done at New Khurja station at OCC no additional Layer-3 Switches are not required. Please confirm	Provisions of Bidding Document are sufficiently clear and shall prevail.  Being a Design build contract, the design shall be proposed by the Contractor and approved by the Engineer at design stage after award of contract.
279	Part-2 / Section VI / Volume-4 / Clause: 6.4.3.3 Page no. 969 of 1271	To improve the availability of Data Networking System various measure such as <b>Resilient Ethernet Protocol</b> , Pseudo wire Redundancy, Link Aggregation (IEEE 802.3ad) on Network/Access Ports, Rapid Spanning Tree Protocol (IEEE 802.1w), Multiple Spanning Tree Protocol (IEEE 802.1s), MPLS-TE Fast Reroute etc. as required shall be implemented.	Resilient Ethernet Protocol is CISCO proprietary protocol and is not an open standard protocol. Hence this requirement is in conflict with requirement mentioned in Clause 4.1.2 (2). Kindly clarify.	The Brief description of referred clause is not correct.
280	Part-2 / Section VI / Volume-4 / Clause: 6.5.1.1 Page no. 970 of 1271	Layer-3 Switches of WAN shall have 20 Nos. 10/100/1000 Base-T Auto Sensing Ports with RJ 45 Connectors, 4 Nos. 100/1000 Base-X ports for SFP complying with IEEE 802.3, IEEE 803.3u and 802.3ab standard, and 4 No's of 10G BaseX ports supporting Half Duplex, Full duplex and Auto-Negotiation on each port to optimize bandwidth.	We understand that the clause refers to: 10Base-T with standard IEEE 802.3, 1000Base-T with standard IEEE 802.3ab, and 100Base-T with standard IEEE 803.3u. In that case, IEEE 803.3u should be replaced with IEEE 802.3u. Please confirm	Kindly refer response to query at S.No. 136.
281	Part-2 / Section VI / Volume-4 / Clause: 6.5.2.1 Page no. 970 of 1271	Layer-2 Switches of WAN shall have 24 Nos. 10/100 Base-T Auto Sensing Ports with RJ 45 Connectors, complying with IEEE 802.3, IEEE 803.3u and 802.3ab standard, supporting half duplex, full duplex and Auto-Negotiation on each port to optimize bandwidth.	We understand that the clause refers to: 10Base-T with standard IEEE 802.3, 1000Base-T with standard IEEE 802.3ab, and 100Base-T with standard IEEE 803.3u.	Kindly refer response to query at S.No. 137.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
			In that case, IEEE 803.3u should be replaced with IEEE 802.3u. Please confirm.	
282	Part-2 / Section VI / Volume-4 / Clause: 6.5.2.12 Page no. 971 of 1271	All equipment of Data Networking System shall work from 180 to 270 V 50 $\pm$ 3% Hz AC single phase supply from UPS.	No COTS Data Network System equipment works on 180 to 270 V 50 $\pm$ 3% Hz AC. Kindly re-consider the clause.	Kindly refer response to query at S.No. 138.
283	Part-2 / Section VI / Volume-4 / Clause: 7.1.2 Page no. 974 of 1271	The Telephone System shall comprise of Administrative Telephone Network, Direct Line Telephone (DLT) Network, Gate & Block communication system, Control Communication System, and Emergency Communication System.	Our understanding is Gate & Block communication system is a part of PBX system	Kindly refer response to query at S.No. 139.
284	Part-2 / Section VI / Volume-4 / Clause: 7.3.4 Page no. 975 of 1271	The PBXs shall have connection to the Public Switched Telephone Network (PSTN). This shall allow pre-selected extensions to access the PSTN or vice versa.	The bidder will ensure that provision will exist to support connection from PSTN to the PBXs. However, please clarify who will provide the PSTN connection and who will bear the initial and recurring cost pertaining to these connections.	Only PSTN connection shall be provided by the Employer.
285	Part-2 / Section VI / Volume-4 / Clause 7.3.5.15 Page no. 978 of 1271	The Administrative Telephone Network shall have the capacity of ringing up to minimum of three telephone sets connected in parallel.	This is feasible only for Analog phones. Please clarify if the same may be used for this purpose.	The Brief description of referred clause is not correct.
286	Part-2 / Section VI / Volume-4 / Clause: 7.3.7.6 Page no. 981 of 1271	Indian Railway Telephone Network shall be integrated with Direct Line Communication System, so that one touch dialing can be done from Direct Line Console to important Operation Locations of Indian Railway as decided by the Engineer.	Telephone System of CP-305 is required to be integrated with CP-104, CP-203, CP-105 and CP-304. Also, CP-104 is being integrated with IR. It is suggested that all calls to IR may be carried over the IR Telecom network once handed over to IR on that interface. Please confirm the same.	Kindly refer response to query at S.No. 141.
287	Part-2 / Section VI / Volume-4 / Clause: 7.3.7.8 (3) Page no. 981 of 1271	It shall be possible from Direct Line Telephone to make normal and emergency direct line calls to the designated controllers in OCC. Different audio and visual indications shall be provided for incoming direct line calls on the Direct Line Consoles or Direct Line Telephone for normal and emergency calls.	Our understanding is, different audio and visual indications are not applicable for gate phone, since analog phone is required and working shall as per gate working rule approved by IR.	Provisions of Bidding Document are sufficiently clear.
288	Part-2 / Section VI / Volume-4 / Clause: 7.3.8.2 Page no. 981 of 1271	After integration, Administrative Telephone Networks shall provide following feature transparency across all the PBXs provided under this Contract as well as under Contract Package CP-104, CP-105, CP-203 and CP-304	Please note that Integration and interoperability depends on both sides supporting the feature in a standard manner, wherein the standard shall ideally be an International standard such as ITU, Indian Standard or an establish industry standard. Therefore, please confirm that the integration responsibility and feature	Kindly refer response to query at S.No. 142.



S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response								
(1)	(2)	(3)	(4)	(5)								
			transparency requirement shall be a joint responsibility of all interfacing contractors.									
289	Part-2 / Section VI / Volume-4 / Clause: 7.3.8.5 Page no. 982 of 1271	Direct Line Telephone Network shall be integrated with DTL Network provided under CP- 104, CP-105, CP-203 and CP-304.	DTL Network shall be replaced with DLT Network	Kindly refer response to query at S.No. 145.								
290	Part-2 / Section VI / Volume-4 / Clause: 7.3.8.8 (1) Page no. 982 of 1271	PBX provided under this Contract shall be integrated with PBX provided under other contract packages of EDFC through minimum 4 PRI for Administrative Telephone Network and 4 PRI for DLT Network. PBX provided under Contract Packages CP-104, CP-105, CP-203 and CP-304 shall be suitably upgraded for this integration.	Our understanding is PBX provided under Contract Packages CP-104, CP-105, CP-203 and CP-304 are already integrated , therefore integration with CP305 is required at one point through 4 PRI for Administrative Telephone Network and 4 PRI for DLT Network. Please confirm	Kindly refer response to query at S.No. 146.								
291	Part-2 / Section VI / Volume-4 / Clause: 7.3.8.9 Page no. 982 of 1271	If integration is done by upgrading PBX, Telephony Servers, Telephone NMS and associated equipment provided at OCC under Contract Package CP-104: (2) The Contractor shall be responsible and liable for upgraded PBX, Telephony Server, Media Gateway, Telephone NMS and other associated equipment during Defect Notification Period and during Service Life.	We understand that liability during Defect Notification period shall be limited to upgraded part only and not for the complete equipment. Please confirm.	Kindly refer response to query at S.No. 143.								
292	Part-2 / Section VI / Volume-4 / Clause: 7.3.8.10 Page no. 982 of 1271	The following additional PRI over E1 Link between PBXs provided under this Contract as well as under Contract Package CP-104 and Contract Package CP-304 shall be provided: <table border="1"><tr><td>SN</td><td>Communication Link</td></tr><tr><td>1</td><td>New Pilkhani – New Khurja</td></tr><tr><td>2</td><td>New Tapri - New Chawapail</td></tr><tr><td>3</td><td>New Khurja - New Tapri</td></tr></table>	SN	Communication Link	1	New Pilkhani – New Khurja	2	New Tapri - New Chawapail	3	New Khurja - New Tapri	As per our understanding we have to provide 1+1 PRI cards for the mentioned Section. Please Clarify.	Provisions of Bidding Document are sufficiently clear. Also refer clause 7.3.8.11 of PS / Telecommunication works
SN	Communication Link											
1	New Pilkhani – New Khurja											
2	New Tapri - New Chawapail											
3	New Khurja - New Tapri											
293	Part-2 / Section VI / Volume-4 / Clause: 7.5.4.1 Page no. 988 of 1271	The VRS shall provide recording of stipulated voice conversations over Telephone System. It shall be a digital system providing sufficient capacity for recording up to 4 weeks before being overwritten. The VRS shall comply with the requirements as given below.	Kindly confirm if new VRS system needs to proposed for CP 305 or existing VRS system of CP-104, CP-105 & CP-203, CP-304 can be expanded to cater to CP 305 requirement as well. Please confirm the subscriber count and Active subscriber ratio in case new VRS system needs to be proposed.  Further, We understand VRS system for GSM-R	Provisions of Bidding Document are sufficiently clear. Being a Design build contract, the Design shall be proposed by the Contractor and approved by the Engineer at design stage after award of contract.								

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
			package is independent of other packages. This is applicable on the all packages CP-104, CP-105, CP-203, CP-304 & CP-305. Kindly confirm	
294	Part-2 / Section VI / Volume-4 / Clause: 7.5.4.11 Page no. 989 of 1271	The VRS shall comply with the following specifications: 1 wow and flutter : < 0.8% peak 2 frequency response : 300 to 3400 Hz within + 3 dB; 3 Signal to noise ratio : > 42 dB; 4 Cross talk immunity : > 60 dB at 1 KHz; 5 Distortion : < 3% 6 Automatic gain control level : +3 dB in recording level for all input	Our understanding "wow and flutter" is feature of analog VRS. For Digital VRS this is not required. Please confirm.	Only applicable Specification shall be used for VRS while designing the Telecom System.
295	Part-2 / Section VI / Volume-4 / Clause: 7.5.6.3 Page no. 989 of 1271	Multi-core cables shall be provided and connected from the distribution frames inside TER to the distribution frames at the MDF for connection between the PBX and the trunk circuits of PSTN. The interface between the Telephone system and the PSTN circuits shall be at the MDF.	Our understanding is Employer will provide the PSTN connectivity at Station MDF, Contractor will integrate with PBX system.	Kindly refer response to query at S.No. 140.
296	Part-2 / Section VI / Volume-4 / Clause: 8.1.1 Page no. 991 of 1271	The Contractor shall provide Mobile Train Radio Communication (MTRC) System based on GSM-R for wireless voice and data communication to support the operational and maintenance requirements of EDFC.	We understand that we have to provide BTS in complete section of CP-305. i.e Parallel as well as detour section. Please clarify.	Bidder's understanding is correct.
297	Part-2 / Section VI / Volume-4 / Clause: 8.1.2 Page no. 991 of 1271  &  Part-2 / Section VI / Volume-4 / Clause: 8.5.1.1 Page no. 1004 of 1271  &  Part-2 / Section VI / Volume-1 / Clause: 2.5.1	The system shall be designed based on European Integrated Railway Radio Enhanced Network (EIRENE)'s Functional Requirements Specification (EIRENE FRS v7.3.0) and System Requirements Specification (EIRENE SRS v15.3.0).  The MTRC System shall be designed based on European Integrated Railway Radio Enhanced Network (EIRENE)'s Functional Requirements Specification (EIRENE FRS v7.3.0 or latest) and System Requirements Specification (EIRENE SRS v15.3.0 or latest).  <b>2.5 CODES &amp; STANDARDS</b> 2.5.1 Equipment, material and systems/sub-systems shall be designed, manufactured and tested in accordance with the latest issue of approved and recognized codes and standards defined and proposed by the Contractor and approved for the Work. All standards, codes and manuals with correction slips issued up to 28 days prior to last date	As per our understanding, latest EIRENE specifications shall be followed and used as specified in clause 8.5.1 in General Specifications.  Hence, as per the referred clause no. 8.1.2 & 8.5.1.1, we request you to kindly amend the clause specifying the design of GSM-R system as per EIRENE FRS v7.3.0 specification or latest and EIRENE SRS v15.3.0 specification or latest.	Kindly refer Para 2.5.1, Part-2, Section (VI), Volume-1 of General specification.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response																																												
(1)	(2)	(3)	(4)	(5)																																												
	General Specifications Page no. 207 of 1271	of second stage of Bid submission shall be applicable for this bid. Any other applicable code, circular, instruction of UIC shall be referred with the approval of the Engineer.																																														
298	Part-2 / Section VI / Volume-4 / Clause: 8.2.5.1 (3) Page no. 991 of 1271	Base Station Controller (BSC), Transreceiver Adaptation Unit/Transreceiver Coding Unit (TRAU/TCU) and Radio NMS complete with all hardware, firmware software and licenses for Khurja – Pilkhani section of EDFC. If it is possible to upgrade the BSC, TRAU/TCU and Radio NMS provided at OCC under Contract Package CP-304 to meet the requirements of this particular specification, Contractor shall upgrade this BSC, TRAU/TCU and Radio NMS duly interfacing with Contractor of Contract package CP-304.	We understand that new BSC is not in scope of CP-305.  Please confirm of understanding.	Provisions of Bidding Document are sufficiently clear.																																												
299	Part-2 / Section VI / Volume-4 / Clause: 8.2.5.1 (4) Page no. 991 of 1271	Base Station Transceivers (BTSs) Khurja – Pilkhani section of EDFC. It shall include the supply of towers and antennae to be erected near the BTS.	We understand that we have to provide BTS in complete section of CP-305. i.e. Parallel as well as detour section. Please clarify.	Bidder's understanding is correct.																																												
300	Part-2 / Section VI / Volume-4 / Clause: 8.2.5.1 (5) Page no. 992 of 1271	Upgradation/ Augmentation/ Reconfiguration of Radio Dispatcher Consoles and associated hardware/accessories, software and licenses provided under Contract Package CP-304 to meet the requirement of this Particular Specification	Kindly confirm if new Radio dispatcher system needs to proposed for CP 305 or existing Radio Dispatcher system of CP-304 can be expanded to cater to CP 305 requirement as well.	Provisions of Bidding Document are sufficiently clear.																																												
301	Part-2 / Section VI / Volume-4 / Clause: 8.3.6.5 (3) Page no. 995 of 1271	The following call related services are to be supported for each type of mobile radio: Restriction of display of user identity <table border="1"><thead><tr><th></th><th>Cab Radio</th><th>GPH</th><th>OPH</th></tr></thead><tbody><tr><td>Display of calling user identity</td><td>M</td><td>M</td><td>M</td></tr><tr><td>Display of called user identity</td><td>M</td><td>M</td><td>M</td></tr><tr><td>Restriction of display of user identity</td><td>Y</td><td>Y</td><td>Y</td></tr><tr><td>EIRENE closed user group</td><td>M</td><td>Y</td><td>M</td></tr><tr><td>Call forwarding:</td><td>Y</td><td>Y</td><td>Y</td></tr><tr><td>Call hold</td><td>M</td><td>Y</td><td>Y</td></tr><tr><td>Call waiting</td><td>M</td><td>M</td><td>M</td></tr><tr><td>Call barring</td><td>M</td><td>Y</td><td>M</td></tr><tr><td>Auto answer service</td><td>M</td><td>Y</td><td>M</td></tr><tr><td>Call supervisory information</td><td>M</td><td>N</td><td>Y</td></tr></tbody></table>		Cab Radio	GPH	OPH	Display of calling user identity	M	M	M	Display of called user identity	M	M	M	Restriction of display of user identity	Y	Y	Y	EIRENE closed user group	M	Y	M	Call forwarding:	Y	Y	Y	Call hold	M	Y	Y	Call waiting	M	M	M	Call barring	M	Y	M	Auto answer service	M	Y	M	Call supervisory information	M	N	Y	As per our understanding, this is a network feature and should be removed from mobile handsets.	Kindly refer response to query at S.No. 160.
	Cab Radio	GPH	OPH																																													
Display of calling user identity	M	M	M																																													
Display of called user identity	M	M	M																																													
Restriction of display of user identity	Y	Y	Y																																													
EIRENE closed user group	M	Y	M																																													
Call forwarding:	Y	Y	Y																																													
Call hold	M	Y	Y																																													
Call waiting	M	M	M																																													
Call barring	M	Y	M																																													
Auto answer service	M	Y	M																																													
Call supervisory information	M	N	Y																																													
302	Part-2 / Section VI / Volume-4 / Clause: 8.3.10.2	Contractor shall also provide one Radio Dispatcher Console at TER in OCC at Allahabad. This shall be used for maintenance purposes.	Kindly confirm if new Radio dispatcher system (Qty=1) needs to proposed for CP 305.	Kindly refer response to query at S.No. 165.																																												

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	Page no. 997 of 1271			
303	Part-2 / Section VI / Volume-4 / Clause: 8.5.1.1 (3) Page no. 1004 of 1271	Voice Recording System (VRS) interfaced to above Network Sub-Systems (NSS) for recording voice communications taking place on RDC, Cab Radio and OPH. All voice communications of Radio Dispatcher Console, Cab Radio and Operation Radio shall be recorded by the Voice Recording System (VRS) being provided under Contract Package 304. The Contractor shall be responsible for upgradation/reconfiguration, if required, of Voice Recording System (VRS) being provided under Contract Package CP-304 to meet the requirement under this contract.	We understand that supply of VRS is not in scope of CP-305. Existing VRS at CP-304 needs to be integrated with new Network elements being proposed as part of CP-305.  Please confirm of understanding.	Kindly refer response to query at S.No. 159.
304	Part-2 / Section VI / Volume-4 / Clause: 8.6.3 Page no. 1012 of 1271	Wherever the equipment of MTRC System being provided under Contract Package CP-304 is being upgraded / augmented / reconfigured, the same shall not in any way utilize available provision of expansion.	We understand that we don't have to provide new Equipment for MTRC System. Please Clarify.	Kindly refer response to query at S.No. 158.
305	Part-2 / Section VI / Volume-4 / Clause: 9.1.2 Page no. 1013 of 1271	This Synchronized Time Information shall be used to synchronize slave clocks which shall be located at Stations, Depots & Offices in Khurja – Pilkhani section of EDFC Phase-III.	Kindly clarify the location of offices since there is no mention of "Offices" in Clock Schedule mentioned in PS Clause 9.3.5.	Kindly refer response to query at S.No. 147.
306	Part-2 / Section VI / Volume-4 / Clause: 9.3.1 Page no. 1013 of 1271	The Master Clock System shall be based on a 'Central Master Clock', which shall be synchronized to 'Universal Time Co-ordinated' (UTC) by Radio Signals transmitted via the US Department of Defence's 'Global Positioning System' (GPS) Real Time Navigation Satellites.	Our understanding is that Master Clock System deployed under CP104, shall be upgraded to cater the master clock requirement in this phase. Please confirm this.	Kindly refer response to query at S.No. 149.
307	Part-2 / Section VI / Volume-4 / Clause: 9.3.4 Page no. 1013 of 1271	At OCC, Station, Depot and Office, a Sub-Master Clock Unit shall receive the time information from the Central Master Clock and shall convert it into synchronization pulses for the slave clock units at those locations.	Our understanding is that Sub-Master clock is already provided at OCC by CP104, same shall be upgraded to cater the Sub-master clock requirement in this phase. Please confirm this.	Kindly refer response to query at S.No. 150.
308	Part-2 / Section VI / Volume-4 / Clause: 9.5.3.9 Page no. 1017 of 1271	The Master Clock System shall be capable to work with 230 Volts +/- 10% AC 50 Hz Power Supply. The power supply shall have backup from UPS.	The Master Clock Unit and Sub-Master Clock Units will be deployed in the TERs and stable battery backed up - 48V DC supply is present at TER. Therefore, DC may be permitted as a source for Master Clock System. Similarly, the Clocks may be powered by POE.	Kindly refer response to query at S.No. 148.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
			Kindly request you amend the clauses accordingly.	
309	Part-2 / Section VI / Volume-4 / Clause: 11.5.2.1.1 Page no. 1026 of 1271	Fixed Box Type IP Cameras shall have following technical specifications as a minimum: Shutter Speed: 1 to 1/1,00,000	As per our previous experience we understand that shutter speed of 1/100,000 is not possible. We request you to update the shutter speed to 1/10,000 (100 uSec).	Kindly refer response to query at S.No. 151.
310	Part-2 / Section VI / Volume-4 / Clause: 11.5.2.7.1 Page no. 1029 of 1271	8 Port Layer-2 Switches are to be provided for field applications. These switches should have one 10/100/1000 SFP Port (fibre port) and 7 fast Ethernet Ports with RJ-45 Connectors, complying with IEEE 802.3, IEEE 803.3u and 802.3ab standard. These Layer-2 Switches should also be PoE compliant as per IEEE 802.3af.	We understand that the clause refers to: 10Base-T with standard IEEE 802.3, 1000Base-T with standard IEEE 802.3ab, and 100Base-T with standard IEEE 803.3u. In that case, IEEE 803.3u should be replaced with IEEE 802.3u. Please confirm.	Kindly refer response to query at S.No. 152.
311	Part-2 / Section VI / Volume-4 / Clause: 12.2.2 Page no. 1035 of 1271	Provision of suitable Earth Leakage Detector and Alarms shall be made individually at each location (OCC, Stations, GSM-R Locations, LC Gate Locations, etc.).	Please note that an Earth Leakage detector is connected at the (-48 VDC) output of the SMPS battery charger. For taking -48VDC the positive polarity of the battery charger is earthed with the telecom load. That means an Earth leakage detector will always give false alarm. Even if some of the feeders are not earthed then also it will give this alarm. You are requested to remove this requirement that leads to false alarms generation or amend the clause suitably.	Kindly refer response to query at S.No. 153.
312	Part-2 / Section VI / Volume-4 / Clause: 12.3.7 Page no. 1035 of 1271	The following data shall apply to 48 V DC Battery Backup System: (1) Input Voltage Range (Single phase): 230 V AC (+10 %, - 20%) (2) Input frequency: 50 Hz +/- 5% Output Current: As required for each location	As per Clause no 12.3.4 of PS Telecommunication Compliance to specification RDSO/SPN/TL-23/99 VER 4.0 is required. The AC voltage range specified in this specification is 165V – 260VAC, frequency 50 Hz+/- 2Hz (means from 48 Hz – 52 Hz). Please amend the clause accordingly.	Kindly refer response to query at S.No. 154.
313	Part-2 / Section VI / Volume-4 / Clause: 13.3.6 Page no. 1038 of 1271	Provision of Lighting, Power Outlets, Fans, Ventilator and Air-Circulation shall be made in accordance with Interface Requirements as mentioned in Chapter-10 of General Specification.	Kindly clarify E&M interfaces involved.	Refer chapter 9 (Lighting System) of Part-2, Section VI, Vol-5.
314	Part-2 / Section VI / Volume-4 / Clause: 13.3.13 Page no. 1039 of 1271	Smoke and Fire Detection System as per details in Chapter- 4 of this Particular Specification shall be provided in Telecom Equipment Rooms and Telecom Power Supply Equipment Rooms, with facility of Alarm Generation at station and OCC.	Kindly clarify E&M interfaces involved.	Refer chapter 12 (Fire detection and alarm system) of Part-2, Section VI, Vol-5.
315	Part-2 / Section VI / Volume-4 / Clause: 13.7.6	Outdoor Signalling Cables and Outdoor Telecommunication Cables shall not be laid in same trench. If it is inescapable to lay Signalling Cables and	Most of the time, separate trenches for Signaling and Telecom are not feasible due to lack of space availability. Hence, It is suggested that to maintain	Kindly refer response to query at S.No. 155.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	Page no. 1041 of 1271	Outdoor Telecommunication Cables in same trench, suitable separation shall be provided between the two as per the requirement of PS-Signalling Works, IRSEM and Indian Railway Telecommunication Manual and approved by the Engineer.	uniformity across project, the outdoor Signalling and Telecom Cables in same trench may be permitted at all locations. Kindly confirm.	
316	Part-2 / Section VI / Volume-4 / Clause: 17.1.8 Page no. 1067 of 1271	Contractor shall liaison with designated authorities in Indian Railway to design Telecom Arrangement for/at boundaries with Indian Railways. The contractor shall execute the so approved Telecom Arrangement for/at boundaries with Indian Railways.	We understand that any extension of Telecom to IR shall end at DFCCIL / IR boundary and further extension will be carried out by IR, especially any excavation near the IR tracks / IR yard outside the DFCCIL boundary. Please confirm.	Kindly refer response to query at S.No. 156.
317	Part-2 / Section VI / Volume-4 / Clause 9.5.3.8 Page no. 1017 of 1271	The Slave Clocks shall be manufactured to be used in non-air-conditioned environment with high humidity exposure.	Please highlight what is the Range of 'High Humidity' expected?	Please refer to Clause 2.16 of General Specifications of Bidding Document for climatic conditions of the locations where Slave Clocks are to be installed.
318	Part-2 / Section VI / Volume-4 / Clause 13.3.1 Page no. 1038 of 1271	Telecommunication Equipment Room at Stations, IMD, IMSDs, Residential Colonies, Club/Institute and Guest House will be constructed by CST Contractor to install the Telecommunication Equipment.	We understand that If the requirement of telephone at Residential colonies, Club/Institute and Guest House is being fulfilled through PIJF cable from nearest station, there is no requirement to construction / setup a TER at these locations. Kindly confirm.	Provisions of Bidding Document are sufficiently clear.
319	Part-2 / Section VI / Volume-4 / Clause 13.3.2 Page no. 1038 of 1271	Telecom Power Supply Equipment Rooms at Stations, IMD, IMSDs, Residential Colonies, Club/Institute and Guest House will be constructed by CST Contractor to install the Telecom Power Supply Equipment.	We understand that If the requirement of telephone at Residential colonies, Club/Institute and Guest House is being fulfilled through PIJF cable from nearest station, there is no requirement to install Telecom Power Supply Equipment at these locations. Kindly confirm.	Provisions of Bidding Document are sufficiently clear.
320	Part-2 / Section VI / Volume-4 / Clause 13.3.3 Page no. 1038 of 1271	Telecommunication Equipment Room/Telecom Power Supply Equipment Room at Interfacing IR Stations, GSM-R Locations, TSSs, SPs, SSPs and any other location as required shall be constructed by Contractor as stipulated in Particular Specifications-Building & Structure Works. These rooms shall be preferably be co-located with the signaling Equipment Room/Signaling Power Supply Equipment Room. At these co-located locations a common S&T Power Supply Equipment Room for housing signaling Power Supply Equipment as well as Telecom Power Supply Equipment shall be provided with the approval of the Engineer.	We understand that if the requirement of telephone at Interfacing IR stations is being fulfilled through PIJF cable from nearest station, there is no requirement to construction / setup a TER (13.3.1) and TP SER (13.3.2) at Interfacing IR stations? Kindly confirm and also confirm the scope for provision of Air-conditioning.	Provisions of Bidding Document are sufficiently clear and shall prevail. For air conditioning, Please refer Part 2, Vol.5: E&M and Associated Works of Bid Document.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
321	Part -2 / Section VI / Volume 5 / Particular Specification / Clause No. 6.2.15 / 1 (b) / Page No. 1129 of 1271	<b>Lighting and Power Distribution Boards –</b> It shall have a degree of protection not less than IP 54.	As per the referred clause, We would like to mention that IP-42 distribution board would suffice for the indoor application and is easily available in market. Moreover, IP-54 Distribution boards are expensive. Hence we request you to kindly amend the clause accordingly.	The provisions of Bidding document shall prevail.
322	Part -2 / Section VI / Volume 4 / Particular Specification / Clause No. 3.6.9 / Page No. 947 of 1271	<b>Electromagnetic Compatibility (EMC) –</b> EMC Testing shall be carried out on all equipment identified in the design stage which requires attention regarding EMC in accordance with IEC 61000 and to meet overall compliance to EN 50121	EMC tests require extensive lab set ups and hence will not be feasible to carry out at sites/field. Hence we request you to kindly allow us to submit the related test reports conducted at labs/manufacturing locations. Therefore Kindly amend the clause accordingly.	The provisions of Bidding document shall prevail.
323	Part -2 / Section VI / Volume 4 / Particular Specification / Clause No. 8.5.6.5 (4) / Page No. 1009 of 1271	<b>Built-in Test Routine –</b> The cab radio shall be provided with a radio test port to enable full specification testing.	The Cab radio test ports for full specification testing - Full specification testing can be done only in factory facilities/environment with a test bench. Hence we request you to kindly amend the clause and requirements as... "Relevant test reports on testing should be submitted"	The provisions of Bidding document shall prevail.
324	Part 1 / Section II / Bid Data Sheet / ITB 29.8 Page No. 44 of 1271	The bidders may note that this DFCC project being funded by the World Bank, qualifies for exemption from payment of Customs Duty and Excise Duty on goods supplied / intended to be supplied to the project in terms of Government of India's Notification no. 84/97 – customs dated 11.11.1997 and Central Excise Notification no. 108/95-C E Dated 28.08.1995 (read with all subsequent amendments including amendment dated 01.03.2008) respectively.	In view of implementation of GST from July 1 <sup>st</sup> , 2017, request you to kindly clarify on the changes in taxation for this project and revise the clauses accordingly.	The text quoted by the Bidder in column "Brief Description of Clause /Para No." is not correct. However, the response to query of the Bidder is as follows:  Since the contract price is inclusive of duties, taxes and other levies payable by the Contractor under the contract, or for any other cause, as of the date 28 days prior to the deadline for submission of bids, shall be included in the total Bid Price submitted by the Bidder as per ITB 29.8 of Bid Data Sheet. With introduction of GST from 1st July, 2017, the contract price shall include GST.
325	Volume – 1 / Section – II: BDS /	For the purpose of conversion of foreign currency in to local currency i.e. Indian Rupees (INR) or vice versa,	For the purpose of conversion of foreign currency in to local currency i.e. Indian Rupees (INR) or vice versa,	Provision of Bidding Documents shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	ITB 30.1 (b) Page No. 44 of 1271	Bidders shall use the Reference Rates of Foreign Currency published by Reserve Bank of India (www.rbi.org.in), on the Base Date (28 days prior to the last date of second stage bid submission)	we would request DFCCIL to provide a specific date of conversion. This would help us to avoid re-working and preparation of CA Certificates for some of the Tender Forms (such as Form CCC, Form Fin-3.3 - Financial Resources, etc.) in case of any extension of bid submission date.	
326	Bid Document / Section IV. Bidding Forms / Form LOP Page No. 80 of 1271	<p>The Form LOP is addressed to: The Managing Director 5th Floor, Pragati Maidan Metro Station Building, New Delhi – 110 001</p> <p>However, as per ITB 19.1, For First Stage Technical Proposal, for submission purposes only, the Employer's address is: Dedicated Freight Corridor Corporation of India Limited, Metro Station Building Complex, Pragati Maidans 4th Floor, Room No. 432, New Delhi, 110001, India Attention: Mr. S. K Gupta, Group General Manager /Elect-IV/EC Telephone: +91 11 23370526 Facsimile number: + 91 11 2345 4701 Electronic mail address: sanjaykgupta@dfcc.co.in</p>	Kindly clarify, whether the Form LOP has to be addressed to The Managing Director OR to GGM/Elect-IV/EC.	Provisions of Bidding document are self-explanatory and shall prevail.
327	Bid Document / Section IV / Bidding Forms Page No. 91 of 1271	Form SUP - Proposed Subcontractors and Suppliers for Major Items of Works	<p>The Bidder is being asked to furnish the "Approximate Value of proposed Subcontracting Items (in percentage of the approximate total value of the Contract)".</p> <p>Since the first stage of Bidding is a Technical submission stage, this data may not be required to be furnished as the same can be calculated only at the time of Stage II: Financial bid submission. Hence, we request DFCCIL to remove this requirement and modify the Form suitably.</p>	Provision of Bidding Documents shall prevail.
328	Bid Document / Section IV. Bidding Forms / Form CU: Copyright Undertaking Page No. 92 of 1271	<p>The Form CU is addressed to: The Managing Director Dedicated Freight Corridor Corporation of India Limited, Pragati Maidan Metro Station Building New Delhi – 110 001</p> <p>However, as per ITB 19.1, the For First Stage Technical Proposal, for submission purposes only, the Employer's address is: Dedicated Freight Corridor Corporation of India Limited, Metro Station Building Complex, Pragati Maidan</p>	Kindly clarify, whether the Form CU has to be addressed to The Managing Director OR to GGM/Elect-IV/EC.	Provisions of Bidding document shall prevail.



S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response																																												
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		4th Floor, Room No. 432, New Delhi, 110001, India Attention: Mr. S. K Gupta, Group General Manager /Elect-IV/EC Telephone: +91 11 23370526 Facsimile number: + 91 11 2345 4701 Electronic mail address: sanjaykgupta@dfcc.co.in																																														
329	Bid Document / Section IV. Bidding Forms/ PRICE SCHEDULE 2.1 / ELECTRICAL WORKS – COST CENTRE 2.1 Page No. 131 of 1271	<table border="1"> <thead> <tr> <th>Price Schedule</th><th>Price Schedule No.</th><th>Cost Centre</th><th>Weightage of Cost Centre 2.1 (%)</th><th>Cost</th></tr> <tr> <th>(1)</th><th>(2)</th><th>(3)</th><th>(4)</th><th>(5)</th></tr> </thead> <tbody> <tr> <td rowspan="9">2.1 [ELECTRICAL WORKS]</td><td>2.1.1</td><td>Surveys, Investigations, Studies, Design &amp; Documents, O &amp; M Manuals and As Built Drawings, Training of Staff</td><td>5</td><td rowspan="9">% as applicable for Cost Centre 2.0 of Apportionment of Contract Price</td></tr> <tr> <td>2.1.2</td><td>OHE Works</td><td>38</td></tr> <tr> <td>2.1.3</td><td>Traction Sub Station (TSS) Works</td><td>23</td></tr> <tr> <td>2.1.4</td><td>Sectioning Post (SP) Works</td><td>2.5</td></tr> <tr> <td>2.1.5</td><td>Sub-Sectioning Post (SSP) Works</td><td>15</td></tr> <tr> <td>2.1.6</td><td>SCADA Works</td><td>1.5</td></tr> <tr> <td>2.1.7</td><td>E&amp;M Works</td><td>7</td></tr> <tr> <td>2.1.8</td><td>Supply of Contract Spares and Special Tools &amp; Instruments</td><td>4</td></tr> <tr> <td>2.1.9</td><td>Integrated Testing, Commissioning and Final Taking over of Works</td><td>4</td></tr> <tr> <td></td><td></td><td><b>Total</b></td><td><b>100%</b></td><td></td></tr> </tbody> </table>	Price Schedule	Price Schedule No.	Cost Centre	Weightage of Cost Centre 2.1 (%)	Cost	(1)	(2)	(3)	(4)	(5)	2.1 [ELECTRICAL WORKS]	2.1.1	Surveys, Investigations, Studies, Design & Documents, O & M Manuals and As Built Drawings, Training of Staff	5	% as applicable for Cost Centre 2.0 of Apportionment of Contract Price	2.1.2	OHE Works	38	2.1.3	Traction Sub Station (TSS) Works	23	2.1.4	Sectioning Post (SP) Works	2.5	2.1.5	Sub-Sectioning Post (SSP) Works	15	2.1.6	SCADA Works	1.5	2.1.7	E&M Works	7	2.1.8	Supply of Contract Spares and Special Tools & Instruments	4	2.1.9	Integrated Testing, Commissioning and Final Taking over of Works	4			<b>Total</b>	<b>100%</b>		<p>Based on our experience in similar Design &amp; Build projects, we would like to bring to your notice that weightages assigned for 2.1.8 Supply of Contract spares and Special tools &amp; Instruments and 2.1.9 Integrated Testing, Commissioning and Final Taking over appears to be very high as against the standard weightages given in other similar projects of approximately 1.5% for these two items. This might affect Contractor's cash flow adversely, as the price against these two items will be paid to the contractor only during final milestones.</p> <p>In view of this, we suggest to revise the schedule as shown below:  2.1.8 Supply of Contract spares and Special tools &amp; Instruments - 1%  2.1.9 Integrated Testing, Commissioning and Final Taking over – 0.5%. The remaining weightage shall be distributed proportionally among schedules 2.1.2 to 2.1.5.</p>	The Provisions of the Bidding Document shall prevail.
Price Schedule	Price Schedule No.	Cost Centre	Weightage of Cost Centre 2.1 (%)	Cost																																												
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330	Particular Conditions – Appendix to Tender / Right of Access to the Site / 2.1 Page no. 1252 of 1271	Possession of the site will be handed over to the Contractor as per the Work Plan approved by the Engineer for the execution of work of CP-305 or as per the Access Schedule for “Formation and Track of CP-303” appended in Part-4 Reference Documents, whichever is later.	The Access schedule for “Formation and Track of CP-303” is not available in Part-4 Reference Documents. From the referred clause, we understand that the section shall be available to CP - 305 contractor only in portions based on the completion status of the other package contractor. We request DFCCIL to provide the section wise Key access dates showing interface with other package contractors in order to plan & program the activities suitably.	Please refer S.N. 13 of Addendum no. 08.																																												
331	Part 2, Section VI, Volume 2, Particular Specifications – 2x25kV, AC	Proof Checking & Design Validation through an Independent agency as approved by the Engineer	Whether the Proof Checking & Validation agency shall also validate the Simulation results. Will the same agency can do the Simulation & Proof Checking or is it required to be different. Please clarify.	The provisions in the Bidding Document are self-explanatory & shall prevail.																																												

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	Traction Electrification and Associated Works/Clause 3.3.4/ Page 20 of 319		We understand Proof Checking agency will only validate the detailed design prepared by the Contractor. Kindly clarify.	
332	Part -2 / Section VI / Volume 2 / Particular Specification / Clause 4.2 / Page No. 23 of 319.	DESIGN ENVIRONMENT	Maximum solar gain of metallic object under the sun: 1kW / sqm. Solar Radiation Gain (both direct from the sun and the contribution first reflected by the earth: 120W/m2. Please clarify which value is required to be used to calculate the temperature rise of the conductor.	Being a design & build contract General/Functional/Performance requirements have been specified. The detailed design is in the scope of the contractor.  The provisions of the Bidding Document shall prevail.
333	Part -2 / Section VI / Volume 2 / Particular Specification / Clause 4.6.1 / Page No. 27 of 319.	Preliminary Design: The Inception Report and Simulation Study Reports along with sufficiently detailed drawings and documents shall be submitted for the purpose of review and approval of the Engineer. The approved inception report and traction simulation report shall then form the basis for the designs.	We assume that Inception report will only provide the approach to the design. On the basis of the Inception report & Traction power Simulation report, the detailed design & drawings can be carried out. Kindly confirm.	The provisions in the Bidding Document are self-explanatory & shall prevail.
334	Part -2 / Section VI / Volume 2 / Particular Specification / Clause 5.1.8 / Page No. 36 of 319.	<b>Second failure conditions (N-2) performance requirement:</b> The N-2 conditions will not cause to overload the traction equipment. The Outcome of this study shall validate the rating and sizes of the Traction Power Supply System of CP- 305.	We understand that for N-2 case, we only have to suggest the headway of the train to be maintained. Sizing of the equipment will be done on the basis of the N-1 condition. Kindly clarify.	Bidder's understanding is correct. The provisions of the Bidding Document shall prevail.
335	Part -2 / Section VI / Volume 2 / Particular Specification / Clause 5.2.2 / Page No. 37 of 319	All trains shall be fully loaded.	Normally in other EDFC projects, the clause is given as: In DN direction 30% trains shall be fully loaded (6500T) and 70 % Trains shall be Empty Trains (1650T). Kindly requesting you to amend the clause accordingly.	Please refer S.N. 02 of Addendum no. 08.
336	Part -2 / Section VI / Volume 2 / Particular Specification / Table 6.3.1 / Page No. 46 of 319.	<b>Table 6.3.1 Maximum Earth Resistance</b>	Please confirm that the maximum earth resistance for SP & SSP as well shall be acceptable within 2.0 ohms as per Indian Railway standards. Kindly note that the value of Earth resistance has been revised to 2.0 ohms for SP and SSP locations in other DFCC E&M tenders.	The provisions of the Bidding Document shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
337	Part -2 / Section VI / Volume 2 / Particular Specification / Table 7.3.2 / Page No. 59 of 319.	Rated secondary voltage: 55kV/ 2x27kV	We understand it should be 55kV/ 2x27.5 kV. Please confirm.	Please refer addendum SN 23 Addendum No. 08.
338	Part -2 / Section VI / Volume 2 / Particular Specification / Clause 6.1.4 / Page No. 42 of 319	<b>Sub Sectioning Posts (SSP):</b> 55 kV Auto Transformers; Standby Auto transformer is to be provided which can be connected to either side of the insulated overlap in case of failure of the existing Auto transformer;	In the Simulation, we are already considering the failure of one AT, in which the adjacent AT will take the total load. If two AT's get failed, it will be N-2 condition which calls for reduced headway. So, we do not understand the requirement for spare transformer. Moreover, in the reference drawing provided for SSP, only 2 Auto Transformer is shown. Kindly clarify. Request to amend the clause accordingly.	Being a design & build contract General/Functional/Performance requirements have been specified. The detailed design is in the scope of the contractor.  The provisions of the Bidding Document shall prevail.
339	Part -2 / Section VI / Volume 2 / Particular Specification / Clause 6.1.5 / Page No. 42 of 319	<b>Sectioning Posts (SP):</b> 55kV Auto Transformers; Standby Auto transformer is to be provided which can be connected to either side of the Neutral Section in case of failure of the existing Auto transformer	In the Simulation, we are already considering the failure of one AT, in which the adjacent AT will take the total load. If two AT's get failed, it will be N-2 condition which calls for reduced headway. So, we do not understand the requirement for spare transformer. Moreover, in the reference drawing provided for SP, only 4 Auto Transformer, 2 on each side of the Neutral section is shown. Kindly clarify. Request to amend the clause accordingly.	Being a design & build contract General/Functional/Performance requirements have been specified. The detailed design is in the scope of the contractor.  The provisions of the Bidding Document shall prevail.
340	Part -2 / Section VI / Volume 2 / Particular Specification / Clause 6.1.3 / Page No. 41 of 319	<b>Traction Substations (TSSs):</b> Auto transformers (as required by design); Standby Auto transformer is to be provided which can be connected to either side of the Neutral Section in case of failure of the existing Auto transformer	Contract condition calls for the V-connected transformer also. If V-connected transformer with center tapping is used, it may eliminate the Auto transformer at TSS. Whether AT at TSS is mandatory to be installed or it will depend on the outcome of the Simulation study. Kindly clarify.	Being a design & build contract General/Functional/Performance requirements have been specified. The detailed design is in the scope of the contractor.  The provisions of the Bidding Document shall prevail.
341	Part 2, Section VI, Volume 2, Particular Specifications – 2x25kV, AC Traction Electrification and Associated	The Auto transformer capacity as indicated as above is minimum for inter-distance of 10-20 km between TSS and SSP or SSP and SP.	V-connected transformer can eliminate the Auto Transformer at TSS. In that case, the distance between AT will not be maintained 13-17 kms. Is it mandatory to keep AT between 13-17 kms or it will be the outcome of the Simulation Study? Please confirm.	Being a design & build contract General/Functional/Performance requirements have been specified. The detailed design is in the scope of the contractor.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	Works/ Clause 7.4.4 / Page No. 62 of 319			Please refer to sub – clause 3.3.1(1)(v)(d), vol. 2, part 2 of the bidding document
342	Part -2 / Section VI / Volume 2 / Particular Specification Table Clause 5.2.2 / Page No. 37 of 319.	Train Stoppage - At alternate Stations for crossing or any other reason etc.	We understand that if Train No.1 will stop at Station-1, and then Train No.2 will stop at Station-2.  Please confirm.	Please refer S.N. 02 of Addendum no. 08.
343	Part – 2 / Volume 2 / Particular Specifications / Clause No. 8.14./ Page 78 of 319	Structure/Uprights and their Foundations	Whether exposure of Foundation is allowed after maintaining the specified distance between center line of track and edge of foundation as per SOD. If exposure is allowed, then the permissible length provided shall be 400mm above ground level. Kindly confirm.	Being a design & build contract General/Functional/Performance requirements have been specified. The detailed design is in the scope of the contractor.  The provisions of the Bidding Document shall prevail.
344	Part 2 / Section VI / Volume 2 / Particular Specifications – 2x25kV / AC Traction Electrification and Associated Works / Clause No: 18.4.3./ Page 185 of 319	<b>Items of interface IR / State Power Authority Interfacing with the IR / State Power Authority will be required for;</b> a. Power Supply Interface at Traction Substations (TSSs), b. 132 kV incoming gantry to allow termination of three phase transmission line. c. 132 kV Gantry with outgoing feeder arrangement for IR transmission Line network, d. Protection Coordination with IR / State Power Authority, e. Shall share Design data regarding short circuit level, harmonic suppression, and ascertain that these data is used for system design. f. Railways in parallelism with DFCC Line	The interface works with IR at Junction Stations will require Traffic blocks as well in addition to Power Blocks. We understand that the permission for traffic blocks from IR shall be obtained by DFCCIL similar to Power blocks and any cost towards the same shall be borne by DFCCIL. Kindly confirm.	The provisions in the Bidding Document are self-explanatory & shall prevail.
345	Part 2, Section VI, Volume 2, Particular Specifications – 2x25kV, AC Traction Electrification and Associated	The System, including all Sub-systems and Equipment shall generally be of approved RDSO/ CORE design/specifications, wherever applicable.	Kindly allow for the procurement of materials from PGCIL/SEB approved vendor when the material is not covered by RDSO/CORE.	The provisions in the Bidding Document are self-explanatory & shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	Works/ Clause 4.4.2			
346	Part 2 / Section VI / Volume 2 / Particular Specifications – 2x25kV, AC Traction Electrification and Associated Works / 8.4 OHE CONDUCTORS/ Page 73 of 319	The contact wire shall be continuous, i.e. splicing or jointing of the conductors is not permitted between terminations or between cut-in insulators. Splices are primarily used during maintenance and shall not be used in the contact wire and /or catenary wire by way of installation or repair unless approved by the Engineer.	Thefts are common in lengthy section. Restrictions on "Splice not acceptable in new installation" should be relaxed. Request you to amend the tender clauses accordingly.	The provisions in the Bidding Document are self-explanatory & shall prevail.
347	Part 2 / Section VI / Volume 2 / Particular Specifications – 2x25kV / AC Traction Electrification and Associated Works / 8.2 FACTORS GOVERNING DESIGN OF OHE / Clause No: 8.2.1/ Page No. 68 of 319	The Contractor shall design the OHE & Traction Return Supply system considering the Track formation Data. Track Formation shall be constructed by CST contractor. The soil properties mentioned by CST contractor shall be considered by the contractor (CP-305) for design including the improvement in Soil conductivity needed.	Kindly confirm the soil to be used for embankment and their Soil bearing capacity.	Please refer to sr. no. 9 sub-clause 1.3.4, vol-1, part -2 of the Bidding Document at page 193 & 194 of 1271  The provisions in the Bidding Document are self-explanatory & shall prevail.
348	General	Details and Drawings of FOB, RUB, ROB, major and minor bridges.	Kindly provide us the details of FOB, RUB, ROB and major and minor bridges details for effective design review.	Refer Alignment Plans in part 4, reference document
349	Part 2 / Section VI / Volume 5 Particular Specifications – E&M and Associated Works / Clause No: 4.6.1	The Contractor (CP-305) shall develop detailed design and drawings for E&M and associated works including those for combined services.	Kindly clarify the format to be followed for combined services drawing i.e., 2D or 3D.	Please refer clause 16, Appendix-2, Vol. 1, Part-2 of the bidding document  The provisions in the Bidding Document are self-explanatory & shall prevail
350	Part 2 / Section VI / Volume 2 / Particular Specifications –	Aerial Earth Wire and BEC	Since installation of BEC will be the outcome of Simulation Study, Kindly clarify if the study eliminates BEC, then also is it required to be provided.	Please refer SN-25 of Addendum No. 8.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	2x25kV / AC Traction Electrification and Associated Works / 13.2 CONTRACT SPARES / Table 13.2.1			
351	General		<p>Kindly confirm if one V-type traction transformer fails in one TSS, can we use the second transformer to provide power to the feeding zone between two SPs as per sound design practice used on 2x25 kV electrification projects overseas?</p> <p>We understand that this is better than extending the feeding zone from an adjacent TSS since train performance will be reduced as per EN 50388.</p>	<p>Being a design &amp; build contract General/Functional/Performance requirements have been specified. The detailed design is in the scope of the contractor.</p> <p>The provisions of the Bidding Document shall prevail</p>
352	General		<p>Kindly confirm if one V-type traction transformer fails in one TSS, can we use the OFAF rating of the second transformer in the same TSS (or the OFAF rating of one transformer in the adjacent TSS) to provide power to the corresponding feeding zone on a continuous basis?</p>	<p>Being a design &amp; build contract General/Functional/Performance requirements have been specified. The detailed design is in the scope of the contractor.</p> <p>The provisions of the Bidding Document shall prevail</p>
353	General		<p>Kindly confirm whether bidder can provide two V-type traction transformers in all TSS with sufficient "spare capacity" to provide power to the corresponding feeding zone under outage conditions of one transformer in the same TSS or outage of an entire TSS? If this is acceptable, we can offer to use the ONAF rating of the transformer in lieu of the OFAF rating. We believe that this solution is better than providing 3 transformers in alternate TSS, since DFCC will not benefit from the spare transformer in case of outage of one transformer in the adjacent TSS where only 2 transformers are provided? We note that the philosophy adopted on all 2x25 kV electrical projects overseas is to provide two traction transformers with sufficient spare capacity at all TSS.</p>	<p>Being a design &amp; build contract General/Functional/Performance requirements have been specified. The detailed design is in the scope of the contractor.</p> <p>The provisions of the Bidding Document shall prevail</p>

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
354	General Future Bay		We assume that the future bay work for Auto Transformer is not under CP-305 contractor. Kindly Confirm?	Please refer sub Clause 6.1.2, Chapter 6, Vol-2, Part-2 of the Bidding Document. This is also clearly indicated in the reference drawings under Part-4 of the Bidding Document.  The provisions in the Bidding Document are self-explanatory and shall prevail.
355	Part 2, Section VI, Volume 2, Particular Specifications – 2x25kV, AC Traction Electrification and Associated Works /Clause no 3.3.5/ page no. 21 of 319	132 kV transmission line network. However gantry at TSS shall be made by the contractor for termination of 132kV incoming and outgoing feeders with associated switch gears as per typical arrangement drawing included in Part-4 reference document.	We consider the line protection equipment are also excluded	Please refer sub-clause 6.9.8, Vol.2, Part-2 of the bidding document.  The Provisions of the Bidding Document shall prevail.
356	GENERAL SUPPLY DIAGRAM	Power supply diagram Isolator is provided to the main line.	Sectioning Switch (SS) is to be provided in main line as required. Being a design & build contract General/Functional/ Performance requirement have been specified. The detailed design is in the scope of the contractor.	The query is merely a statement. However please refer clause no. 8.3.6 of Vol. 2: PS Electrical of the Bid Documents.
357	Part 2, Section VI, Volume 2, Particular Specifications – 2x25kV, AC Traction Electrification and Associated Works /clause 3.3 (4) /Page 13 of 319.	25 kV AC cable/ overhead connections from TSSs/ SPs/ SSPs/ SS /ATS (if any) as required to OHE.	We consider it should be conductor and not cable kindly clarify?	The provisions in the Bidding Document are self-explanatory & shall prevail
358	Part -2 / Section VI / Volume 2 / Particular Specification /	Headway of 17 minutes	As per our understanding, being an absolute block section. Headway of 17 minutes can only be maintained when train moves only in one direction. Kindly clarify?	Please refer S.N 02 of Addendum no. 08.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	Clause 5.2.2 / Page No. 37 of 319			
359	Part -2 / Section VI / Volume 2 / Particular Specification / Clause 5.2.2 / Page No. 37 of 319	Train move in both UP & DN directions	Kindly provide the Operating mesh/ Operation chart for carrying out the simulation study for tendering stage.	Please refer S.N 02 of Addendum no. 08.
360	Part 2, Section VI, Volume 2, Particular Specifications – 2x25kV, AC Traction Electrification and Associated Works/ Clause 6.3 (4)/ Page No. 45 of 319	Design of Earth System	It is mentioned that "Earth rods below the mat shall be copper clad steel and all Earth mat joints shall be exothermic". Please note that using MS for main earth mat and Cu clad MS earth Rod below main earth mat is not advisable due to two dissimilar metals. As per IEEE-80 joints of earth rod shall be exothermic type where as joint with earth mat and earth mat joints can be achieved by various other methods such as welding in case of MS. Kindly confirm the MS rod and Welding of the same instead of exothermic joints for earthing system as a whole.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.  The Provisions of the Bidding Document shall prevail.
361	Part 2, Section VI, Volume 2, Particular Specifications – 2x25kV, AC Traction Electrification and Associated Works/ Clause 7.2.3/ Page No. 59 of 319	Check Metering Equipment including all associated metering class CTs and PTs for measuring power consumption shall be installed by the contractor on the incoming supply side of 132 kV.	Kindly confirm the location is it at TSS end or GSS end	Please refer Item no. 3, Table - 18.4.3, Chapter 18, Vol-2, Part-2 of the Bidding Document.
362	Part 2, Section VI, Volume 2, Particular Specifications – 2x25kV, AC Traction Electrification and Associated Works/ Clause	132/2x25kV TRACTION TRANSFORMERS	Losses for 132kV Power Transformer are not defined. Kindly confirm the maximum losses.	Clause 7.3 of the spec. is of 132/2x25 kV Traction Transformer and not of "Power Transformer" as mentioned in clarification asked for. However the losses of 132/2x25 kV Traction Transformer shall be as per. Para 5.1, sr. no. 14,



S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	7.3/ Page No. 59 of 319			Particular Specifications, Volume-2 of bid document.
363	Part 2, Section VI, Volume 2, Particular Specifications – 2x25kV, AC Traction Electrification and Associated Works/ Clause 7.3/ Page No. 60 of 319	The Insulation oil may be removed for transport and a nitrogen cushion employed during transportation.	Due to safety hazard dry Air filled transportation is proposed in place of Nitrogen. Kindly confirm the acceptability of same.	The provisions in the Bidding Document shall prevail.
364	Part 2, Section VI, Volume 2, Particular Specifications – 2x25kV, AC Traction Electrification and Associated Works/ Page 14 of 139	Insulation over catenary and Feeder wire under all the Bridges, FOBs, ROB's and Over-line structures.	The location and length of all the bridges may please be provided.	Please refer Alignment Plans in Part-4, Reference Document
365	General	Insulation over catenary and Feeder wire under all the Bridges, FOBs, ROB's and Over-line structures.	Kindly provide approval for purchase of insulated catenary from RDSO Vendor without inspection From RITES if values corresponds to less than 5 lakhs	It will only be decided by the Engineer during execution of the project.  The provisions in the Bidding Document shall prevail.
366	Part 2, Section VI, Volume 2, Particular Specifications – 2x25kV, AC Traction Electrification and Associated Works/ Table: No 8.4.1: OHE Conductors/ Page No. 72 of 319	OHE Conductors – Contact wire	Contact wire will be AC type or BC Type may please specified. (Round bottom or Flat bottom)	Please refer addendum SN-15 Addendum No. 08.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
367	Part 2, Section VI, Volume 2, Particular Specifications – 2x25kV, AC Traction Electrification and Associated Works/Clause 8.10.3/Page No. 76 of 319	The proposed cantilever frames will sustain the normal and worst case loading conditions with a factor of safety not less than 2.5.	As per EN 50119, Cl 6.3, (Table 14) "Types of Structures and related load cases" only have to be considered. In view of the above, It is requested to delete the safety factor requirement of 2.5 from cantilevers.	The Provisions of the Bidding Document shall prevail.
368	Part 2, Section VI, Volume 2, Particular Specifications – 2x25kV, AC Traction Electrification and Associated Works/Point (3)/Page No. 73 of 319	The contact wire of minimum 150 mm <sup>2</sup> shall be manufactured out of continuous cast rods by any process conforming to EN 50149/ or RDSO guidelines and withstand a minimum temperature of 100 Deg C continuously without affecting the mechanical properties as per EN 50119.	As per EN 50119, the maximum temperature rise is 80DegC, whereas the specification requires 100DegC. Kindly clarify.	The Provisions of the Bidding Document shall prevail.
369	Part 2, Section VI, Volume 3, Particular Specifications – Signalling works/Point (1.3) SIGNALLING OVERVIEW (1.3.4)/Page No. 5 of 180	Absolute block proving with High Availability Single Section Digital Axle Counter (HASSDAC) as per RDSO/SPN/177/2012 Ver 3.0 shall be provided.	Kindly confirm, whether OFC or Quad will be used for the communication between two stations for block working / UFSBI / SSBPAC system.	Provisions of the bidding document are sufficiently clear. Also please refer clause no. 2.2.1(2) of PS (Signalling Works).
370	Part 2, Section VI, Volume 3, Particular Specifications – Signalling works/Point (2) Technical Requirements (e)/Page No. 20 of 180	Separate power supply for IR and DFC shall be provided at all LC gates. Power supply shall be separate for IR and DFC equipment for maintainability. To achieve this, two separate IPS systems shall be supplied and installed. Construction of Signalling Equipment Room and Signalling Power Supply Equipment Room for DFC are in the scope of present contract.	We understand that 2 nos. IPSs shall be provided for those LC which are interlocked in the block section only. Kindly confirm our understanding.	Provisions of the bidding document are sufficiently clear.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
371	Part 2, Section VI, Volume 3, Particular Specifications – Signalling works/Point (Clause 9.2.7) Contract Spares Sr. no (2) Item No. 06 of the table. /Page No. 119 of 180.	All rail mounted equipment complete with interconnecting cables and connectors and all other associated accessories. - 30% of each type installed. Subject to minimum of one of each.	Does this mean that Tender has to include the 30% Spares detection points (DPs) for MSDAC System? Kindly confirm.	Provisions of the bidding document are sufficiently clear.
372	Clause 1.7, Part 3, Section VIII, Particular Conditions	Assignment	Kindly retain sub clause 1.7 as given in FIDIC Yellow Book	Provision(s) of the Bidding Documents shall prevail.
373	Clause 1.9/5.1, Part 3, Section VIII, Particular Conditions	Errors in Employer's requirements- to be understood with reference to "purpose, scope, design and/or other technical criteria for the works"	Please define the "purpose" of the works with reference to the use of the term "purpose, scope, design and/or other technical criteria for the works"	The attention of the Bidder is invited to Para 1 and its sub – paras of Chapter – 1 of Volume 1, General Specifications, Part – 2 of the Bid Document which clearly bring out the purpose and the scope of the work.
374	Clause 2.1, Part 3, Section VIII, Particular Conditions	Right to access to site: the cost compensation is deleted (and replaced) in case of delay in getting access to site	Kindly retain Sub-Clause 2.1 as given in FIDIC Yellow book	Provision(s) of the Bidding Documents shall prevail.
375	Clause 4.7, Part 3, Section VIII, Particular Conditions	Setting out	Kindly retain Sub-Clause 4.7 as given in FIDIC Yellow book	Provision(s) of the Bidding Documents shall prevail.
376	Clause 4.10, Part 3, Section VIII, Particular Conditions	Site Data	Kindly retain Sub-Clause 4.10 as given in FIDIC Yellow book	Provision(s) of the Bidding Documents shall prevail.
377	Clause 4.12, Part 3, Section VIII, Particular Conditions	Unforeseeable Physical Conditions: In this Sub-Clause, "physical conditions" means man-made or natural physical conditions including sub-surface and hydrological conditions which the Contractor encounters at site during the execution of the Works.	Kindly retain Sub-Clause 4.12 as given in FIDIC Yellow book	Provision(s) of the Bidding Documents shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
		<p>Except as otherwise stated in the Contract:</p> <p>(a) the Contractor accepts total responsibility for having foreseen all difficulties and physical conditions; and</p> <p>(b) the Contract Price shall not be adjusted to take account of any unforeseen physical conditions</p>		
378	Clause 5.1, Part 3, Section VIII, Particular Conditions	General Design Obligation	<p>Please define Purpose</p> <p>We request modification to following clause:</p> <p>- Para 2, 2nd sentence: "The Contractor undertakes that the designers shall be available to attend discussions with the Engineer at all reasonable times, until the expiry date of the relevant Defects Notification Period."- Siemens design personnel will be available for the meetings but not necessarily the same personnel</p> <p>We request to delete the following requirements / clauses :</p> <p>- Para 4, 2nd sentence : "If and to the extent that (taking account of cost and time) an experienced contractor exercising due care would have discovered the error, fault or other defect when examining the Site and the Employer's Requirements before submitting the Tender, the Time for Completion shall not be extended and the Contract Price shall not be adjusted.</p>	Provision(s) of the Bidding Documents shall prevail.
379	Clause 8.8, Part 3, Section VIII, Particular Conditions	Suspension of works	Please delete the last paragraph of PC 8.8	Provision(s) of the Bidding Documents shall prevail.
380	Clause 10.2, Part 3, Section VIII, Particular Conditions	Taking over of parts of the works	Kindly retain Sub-Clause 10.2 as given in FIDIC Yellow book	Provision(s) of the Bidding Documents shall prevail.
381	Clause 13.3, Part 3, Section VIII, Particular Conditions	<p>Variation Procedure:</p> <p>"For varied works of items due to variation as per Sub-Clause 1.1.6.9 determination of adjustment to the Contract Price shall be based on the following:</p> <p>a. Inputs of man-days, machine hours and quantities of materials;</p> <p>b. (i) Prevailing market rates for Materials, hiring of equipment;</p>	We request to modify the clause to suit price adjustment as well in lines with the main contract.	Provision(s) of the Bidding Documents shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
		(ii) Rates being paid by the Contractor for unskilled, semi-skilled and skilled worker as per the records maintained by the Contractor in accordance with the Laws; c. Contractor's overheads and profit at the rate of 15 (fifteen) per cent of the cost arrived at on the basis of (a) and (b) above and; d. Applicable taxes.  <b>No price adjustment shall apply.</b>		
382	Clause 15.3, Part 3, Section VIII, Particular Conditions	Valuation at the date of termination	Kindly delete this clause and retain Sub-Clause 15.3 as given in FIDIC Yellow book	Provision(s) of the Bidding Documents shall prevail.
383	Clause 16.2, Part 3, Section VIII, Particular Conditions	Termination by the contractor	Kindly retain Sub-Clause 16.2 as given in FIDIC Yellow book	Provision(s) of the Bidding Documents shall prevail.
384	Clause 17.3/18.2, Part 3, Section VIII, Particular Conditions	Employer's risks/Insurance of works and Contractor's equipment	Kindly retain Sub Clause 17.3(h), 18.2 sub-para 4(d) as given in FIDIC Yellow Book	Provision(s) of the Bidding Documents shall prevail.
385	Clause 1.10, G.C.C. - FIDIC Yellow Book 1999	Employer's Use of Contractor's Documents	We request to delete sub-paragraph (b) and substitute: b) entitle the Employer's Personnel in proper possession of the relevant part of the Works to copy, use the Contractor's Documents for the purposes of completing, operating, maintaining the Works	Provision(s) of the Bidding Documents shall prevail.
386	Clause 1.12, G.C.C. - FIDIC Yellow Book 1999	Confidential details The Contractor shall disclose all such confidential and other information as the Engineer may reasonably require in order to verify the Contractor's compliance with the Contract	Please confirm the nature of the confidential information that may be required.	At the tender stage, no specific confidential information can be indicated which shall be required by the Engineer. Any information/data, whether confidential or otherwise, which the Engineer may reasonably require in order to verify the Contractor's compliance with the Contract, can be asked by the Engineer.
387	Part2, section VI, Volume 3, Particular, Specification, PS	Technical requirement	As per this para contractor have to provide CCIP for all the gates. Please confirm whether LC gates within station area, requires CCIP or not?	The system shall be designed as per provisions of IRSEM and G&SR with latest amendments.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	2.2. 6.(2) (g )page no 770 of 1271			
388	Yard plans	Mohiuddinpur station, New Meerut Cant & New Deoband.	Right end side Title block & next block stations name and distance information is missing in the engineering scale plan. Request to provide the same.	PDF file of yard plan can be opened (without truncation) on the system having professional adobe reader.  Further, hard copies of the yard plan can be collected from DFCCIL office.
389	Part2, section VI, Volume 3,Particular, Specification, PS 2.2.6(1)(j) page no 769of 1271	Railway crossings System requirement	As per the Clause PS 2.2.6(1) (j), contractor will have to get approval for LC gates circuits from IR. Existing LC gate interlocking may be relay based. So for matching existing circuits, we will select the interlocking system at LC gates either EI or Relay based which suits the requirement. Please confirm.	The Logic for LC gate operation and control is included in bid document and being a Design build contract; the design shall be proposed by the Contractor and approved by the Engineer at design stage after award of contract. Electronic Interlocking is not compulsory for LC gate operation and control.
390	Part2, section VI, Volume 3,Particular, Specification, PS 2.2.6(1)(c )page no 768of 1271	Construction of equipment Room	In the drawing no. GC/DFCC/GL/505/R1 In IR gate man lodge, battery room is missing. Please confirm the place/area to accommodate batteries in the new buildings.	Battery room shall be considered as Part of Signalling Power Supply Equipment Room.
391	Part2, section VI, Volume 3,Particular, Specification, PS 2.1. 10 page no 759 of 1271	System requirement	Braking distance is given in the para as 2598M. To the best of our knowledge, this breaking distance is using 1st time on Indian railways. If there is any latest information received from railway board or RDSO in this regard, request to share the same.	The system shall be designed as per provisions of IRSEM and G&SR with latest amendments taking into consideration the Braking distance as 2598M.
392	Part 2, section VI, Volume 3, Particular, Specification, PS 2.2. 6 (1) (i)(j)(h)page no 769 of 1271	System requirement	This Para explains about Provision of approach warning at 8KM and 4KM for special Class gates. However, in the Appendix 8 list of level crossing contains only 'C' and 'B' class level crossings. Please clarify.	All gates as per list of Level Crossing at Appendix 8 of GS, Vol. 1, Part 2 Section VI shall be considered as Special Class Gates.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
393	Part 2, section VI, Volume 3, Particular, Specification, PS 2.2.4 (1) (b)page no 764 of 1271	System requirement	This Para mentions about the Mid-Section Automatic Signals. In the section, New Philkhani to New Khurja, is single line absolute block signaling is going to adopt. Please clarify about the modified automatic signals of mid-section.	Please refer S.N. 07 of Addendum no. 08.
394	PART-2, SECTION-VI, VOLUME – 4, 3.1.6	Wherever the equipment, being provided under Contract Packages CP-104, CP-105, CP-203 and CP-304 for EDFC are upgraded/augmented/reconfigured under this Contract, the service life of these upgraded/augmented/reconfigured equipment shall be minimum 15 years from date of commissioning of this upgradation/augmentation /reconfiguration.	We understand that clause related to service life is applicable only for upgraded/augment Hardware part or Software only and not applicable for whole equipment. Please confirm.	Kindly refer response to query at S.No. 126.
395	PART-2, SECTION-VI, VOLUME – 4, 4.6.2	Unless otherwise specified, all indoor Telecommunication Equipment installations shall be designed for operation continuously in environmental temperatures range of -5°C to +55°C.	Typically Telecom servers and PCs are installed in air-conditioned environment and supports temperature range from 0oC to +40°C. IT equipment (Servers etc.) operates at +35°C. We kindly request you to modify the temperatures range to 0oC to +40°C for Indoor equipment.	Kindly refer response to query at S.No. 127.
396	PART-2, SECTION-VI, VOLUME – 4, 5.3.3.3	The Second Network shall carry all Voice (including Emergency Communication) and Data (including Traction Power SCADA) Communication between Stations and LC Gates, GSM-R Locations, TSSs, SPs, SSPs, IMD, IMSDs, Staff Quarters etc. Second Network shall also carry all Signal Control Information, Track Vacancy Detection Information and other Vital & Safety Related Information between Stations, LC Gates This shall be formed by two optical fibre cables 24F (min), laid on either side of the track ensuring route diversity, from Khurja to Pilkhani and terminated on ODFs in TERs at Stations, GSM-R Locations, TSSs, SPs, SSPs, IMDs, IMSDs, LC Gates, Staff Quarters and any other location as required. Based upon design, locations of termination of optical fibre cables of Second Network can be clubbed with other Systems/Sub-systems under this Contract while meeting overall Telecommunication Requirements.	Should the OFC be terminated at Staff Quarters even if there is no requirement? Is it necessary that all Second Network locations where OFC is terminated must also be equipped with SDH?	Kindly refer response to query at S.No. 128.
397	PART-2, SECTION-VI, VOLUME – 4, 5.3.3.5	At least 25% of fibres within each cable shall be reserved as spares for future use.	We understand that fibres except the spare portion (i.e. 25%) can be used for intra-Telecom usage. Please confirm.	Kindly refer response to query at S.No. 129.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
398	PART-2, SECTION-VI, VOLUME – 4, 5.3.5.6	Flexible Access Multiplexer or Primary Order Multiplexer shall have minimum 50% spares for all types of Channel Circuits (Minimum 1 for all types of Channel Circuits).	Kindly clarify the meaning of 50% spares for all types of channels – whether the contractor required to provide 50% spare channels between nodes at the backhaul link.	Kindly refer response to query at S.No. 130.
399	PART-2, SECTION-VI, VOLUME – 4, 5.3.9.13(2)	The NMS shall allow the user to configure all existing and new circuits with the following functions: (h) the OFC links from junction stations to the adjacent station of IR	SDH NMS cannot monitor the OFC links from junction stations to the adjacent station of IR unless there is an SDH connectivity established. Also, there is no Junction Station in Khurja – Pilkhani stretch. Kindly clarify the type of monitoring required.	Kindly refer response to query at S.No. 131.
400	PART-2, SECTION-VI, VOLUME – 4, 5.5.3.3(1)	Flexible Access Multiplex Equipment shall conform to ITU-T Rec. G.703, G.704, G.706, G.707, G.708, G.709, G.711, G.732 and G.823.	Kindly note that ITU-T G.707, ITU-T G.708 and ITU-T G.709 are applicable to SDH equipment. Hence, they may please be removed as requirement from Flexible Access Multiplex Equipment.	Kindly refer response to query at S.No. 132.
401	PART-2, SECTION-VI, VOLUME – 4, 5.5.3.3(6)	Adequate numbers of Primary Multiplexers shall be provided so that there is no loss of Communication at any point of time.	Normally, loss of communication is prevented by building Controller card and Power supply redundancy in the equipment. Kindly clarify how “Adequate number of Primary Multiplexers” shall be computed.	Kindly refer response to query at S.No. 133.
402	PART-2, SECTION-VI, VOLUME – 4, 5.5.3.3(7)	Flexible access multiplexer equipment shall be provided with 1+1 protection for all channel levels (VF, Data, etc.) with automatic switch over in case of fault.	Kindly confirm that “1+1 protection for all channel level (VF, Data, etc.) with Automatic Switchover” corresponds to SNCP equivalent functionality at the E1 backhaul link; as ITU-T Rec G.704 defines ‘channel’ as ‘64kbps time slot of E1’.	Kindly refer response to query at S.No. 134.
403	PART-2, SECTION-VI, VOLUME – 4, 6.3.1	WAN shall be created using Layer-3 Switches equipped with minimum 4 Nos. 10GigE Fibre Ports for backbone interconnections. WAN shall connect OCC, Stations, Khurja station, Pilkhani Station, IMD and IMSDs, in Ring Topology using Optic Fibre Cable. Further WAN shall connect TSSs with nearest stations in Redundant Linear Topology using Optic Fibre Cable. Locations of Layer-3 Switches can be clubbed based upon design of other Systems/Subsystems under this Contract while meeting overall Packet Data Communication Requirements.	It is possible to extend the WAN to IMD, IMSD and TSS by means of Layer-2 Switches placed at IMD, IMSD and TSS locations and connecting them to the Layer-3 Switches at nearby Station by means of Second Network Optical Fibre Cable. We understand that it is allowed to extend WAN to IMD, IMSD and TSS locations in this manner and it is not mandatory to provide Layer-3 switches at TSS and IMSD. Kindly confirm the same.	Kindly refer response to query at S.No. 135.
404	PART-2, SECTION-VI, VOLUME – 4, 6.5.1.1	Layer-3 Switches of WAN shall have 20 Nos. 10/100/1000 Base-T Auto Sensing Ports with RJ 45 Connectors, 4 Nos. 100/1000 Base-X ports for SFP complying with IEEE 802.3, IEEE 803.3u and 802.3ab standard, and 4 No's of 10G BaseX ports supporting Half Duplex, Full duplex and Auto-Negotiation on each port to optimize bandwidth.	We understand that the clause refers to: 10Base-T with standard IEEE 802.3, 1000Base-T with standard IEEE 802.3ab, and 100Base-T with standard IEEE 803.3u.	Kindly refer response to query at S.No. 136.



S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
			In that case, IEEE 803.3u should be replaced with IEEE 802.3u. Please confirm	
405	PART-2, SECTION-VI, VOLUME – 4, 6.5.2.1	Layer-2 Switches of WAN shall have 24 Nos. 10/100 Base-T Auto Sensing Ports with RJ 45 Connectors, complying with IEEE 802.3, IEEE 803.3u and 802.3ab standard, supporting half duplex, full duplex and Auto-Negotiation on each port to optimize bandwidth.	We understand that the clause refers to: 10Base-T with standard IEEE 802.3, 1000Base-T with standard IEEE 802.3ab, and 100Base-T with standard IEEE 803.3u. In that case, IEEE 803.3u should be replaced with IEEE 802.3u. Please confirm.	Kindly refer response to query at S.No. 137.
406	PART-2, SECTION-VI, VOLUME – 4, 6.5.2.12	All equipment of Data Networking System shall work from 180 to 270 V 50 ±3% Hz AC single phase supply from UPS.	No COTS Data Network System equipment works on 180 to 270 V 50 ±3% Hz AC. Kindly re-consider the clause.	Kindly refer response to query at S.No. 138.
407	PART-2, SECTION-VI, VOLUME – 4, 7.1.2	The Telephone System shall comprise of Administrative Telephone Network, Direct Line Telephone (DLT) Network, Gate & Block communication system, Control Communication System, and Emergency Communication System.	Our understanding is Gate & Block communication system is a part of PBX system	Kindly refer response to query at S.No. 139.
408	PART-2, SECTION-VI, VOLUME – 4, 7.5.6.3	Multi-core cables shall be provided and connected from the distribution frames inside TER to the distribution frames at the MDF for connection between the PBX and the trunk circuits of PSTN. The interface between the Telephone system and the PSTN circuits shall be at the MDF.	Our understanding is Employer will provide the PSTN connectivity at Station MDF, Contractor will integrate with PBX system.	Kindly refer response to query at S.No. 140.
409	PART-2, SECTION-VI, VOLUME – 4, 7.3.7.6	Indian Railway Telephone Network shall be integrated with Direct Line Communication System, so that one touch dialling can be done from Direct Line Console to important Operation Locations of Indian Railway as decided by the Engineer.	Telephone System of CP-305 is required to be integrated with CP-104, CP-203, CP-105 and CP-304. Also, CP-104 is being integrated with IR. It is suggested that all calls to IR may be carried over the IR Telecom network once handed over to IR on that interface. Please confirm the same.	Kindly refer response to query at S.No. 141.
410	PART-2, SECTION-VI, VOLUME – 4, 7.3.8.2	After integration, Administrative Telephone Networks shall provide following feature transparency across all the PBXs provided under this Contract as well as under Contract Package CP-104, CP-105, CP-203 and CP-304	Please note that Integration and interoperability depends on both sides supporting the feature in a standard manner, wherein the standard shall ideally be an International standard such as ITU, Indian Standard or an establish industry standard. Therefore, please confirm that the integration responsibility and feature transparency requirement shall be a joint responsibility.	Kindly refer response to query at S.No. 142.
411	PART-2, SECTION-VI,	If integration is done by upgrading PBX, Telephony Servers, Telephone NMS and associated equipment provided at OCC under Contract Package CP-104:	We understand that liability during Defect Notification period shall be limited to upgraded part only and not for the complete equipment. Please confirm.	Kindly refer response to query at S.No. 143.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	VOLUME – 4, 7.3.8.9	(2) The Contractor shall be responsible and liable for upgraded PBX, Telephony Server, Media Gateway, Telephone NMS and other associated equipment during Defect Notification Period and during Service Life.		
412	PART-2, SECTION-VI, VOLUME – 4, 7.3.7.8(3)	It shall be possible from Direct Line Telephone to make normal and emergency direct line calls to the designated controllers in OCC. Different audio and visual indications shall be provided for incoming direct line calls on the Direct Line Consoles or Direct Line Telephone for normal and emergency calls.	Our understanding is, different audio and visual indications are not applicable for gate phone, since analog phone is required and working shall as per gate working rule approved by IR.	Kindly refer response to query at S.No. 144.
413	PART-2, SECTION-VI, VOLUME – 4, 7.3.8.5	Direct Line Telephone Network shall be integrated with DTL Network provided under CP- 104, CP-105, CP-203 and CP-304.	DTL Network shall be replace with DLT Network	Kindly refer response to query at S.No. 145.
414	PART-2, SECTION-VI, VOLUME – 4, 7.3.8.8 (1)	PBX provided under this Contract shall be integrated with PBX provided under other contract packages of EDFC through minimum 4 PRI for Administrative Telephone Network and 4 PRI for DLT Network. PBX provided under Contract Packages CP-104, CP-105, CP-203 and CP-304 shall be suitably upgraded for this integration.	Our understanding is PBX provided under Contract Packages CP-104, CP-105, CP-203 and CP-304 are already integrated , therefore integration with CP305 is required at one point through 4 PRI for Administrative Telephone Network and 4 PRI for DLT Network. Please confirm	Kindly refer response to query at S.No. 146.
415	PART-2, SECTION-VI, VOLUME – 4, 9.1.2	This Synchronized Time Information shall be used to synchronize slave clocks which shall be located at Stations, Depots & Offices in Khurja – Pilkhani section of EDFC Phase-III.	Kindly clarify the location of offices since there is no mention of "Offices" in Clock Schedule mentioned in PS Clause 9.3.5.	Kindly refer response to query at S.No. 147.
416	PART-2, SECTION-VI, VOLUME – 4, 9.5.3.9	The Master Clock System shall be capable to work with 230 Volts +/- 10% AC 50 Hz Power Supply. The power supply shall have backup from UPS.	The Master Clock Unit and Sub-Master Clock Units will be deployed in the TERs and stable battery backed up - 48V DC supply is present at TER. Therefore, DC may be permitted as a source for Master Clock System. Similarly, the Clocks may be powered by POE. Kindly request you amend the clauses accordingly.	Kindly refer response to query at S.No. 148.
417	PART-2, SECTION-VI, VOLUME – 4, 9.3.1	The Master Clock System shall be based on a 'Central Master Clock', which shall be synchronised to 'Universal Time Co-ordinated' (UTC) by Radio Signals transmitted via the US Department of Defence's 'Global Positioning System' (GPS) Real Time Navigation Satellites.	Our understanding is that Master Clock System deployed under CP104, shall be upgraded to cater the master clock requirement in this phase. Please confirm this.	Kindly refer response to query at S.No. 149.
418	PART-2, SECTION-VI, VOLUME – 4, 9.3.4	At OCC, Station, Depot and Office, a Sub-Master Clock Unit shall receive the time information from the Central Master Clock and shall convert it into	Our understanding is that Sub-Master clock is already provided at OCC by CP104, same shall be upgraded to cater the Sub-master clock requirement in this phase. Please confirm this.	Kindly refer response to query at S.No. 150.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
		synchronization pulses for the slave clock units at those locations.		
419	PART-2, SECTION-VI, VOLUME – 4, 11.5.2.1.1	Fixed Box Type IP Cameras shall have following technical specifications as a minimum: Shutter Speed: 1 to 1/1,00,000	As per our previous experience we understand that shutter speed of 1/100,000 is not possible. We request you to update the shutter speed to 1/10,000 (100 uSec).	Kindly refer response to query at S.No. 151.
420	PART-2, SECTION-VI, VOLUME – 4, 11.5.2.7.1	8 Port Layer-2 Switches are to be provided for field applications. These switches should have one 10/100/1000 SFP Port (fibre port) and 7 fast Ethernet Ports with RJ-45 Connectors, complying with IEEE 802.3, IEEE 803.3u and 802.3ab standard. These Layer-2 Switches should also be PoE compliant as per IEEE 802.3af.	We understand that the clause refers to: 10Base-T with standard IEEE 802.3, 1000Base-T with standard IEEE 802.3ab, and 100Base-T with standard IEEE 803.3u. In that case, IEEE 803.3u should be replaced with IEEE 802.3u. Please confirm.	Kindly refer response to query at S.No. 152.
421	PART-2, SECTION-VI, VOLUME – 4, 12.2.2	Provision of suitable Earth Leakage Detector and Alarms shall be made individually at each location (OCC, Stations, GSM-R Locations, LC Gate Locations, etc.).	Please note that an Earth Leakage detector is connected at the (-48 VDC) output of the SMPS battery charger. For taking -48VDC the positive polarity of the battery charger is earthed with the telecom load. That means an Earth leakage detector will always give false alarm. Even if some of the feeders are not earthed then also it will give this alarm. You are requested to remove this requirement that leads to false alarms generation or amend the clause suitably.	Kindly refer response to query at S.No. 153.
422	PART-2, SECTION-VI, VOLUME – 4, 12.3.7	The following data shall apply to 48 V DC Battery Backup System: Input Voltage Range (Single phase): 230 V AC (+10 %, - 20%) Input frequency: 50 Hz +/- 5% Output Current: As required for each location	As per Clause no 12.3.4 of PS Telecommunication Compliance to specification RDSO/SPN/TL-23/99 VER 4.0 is required. The AC voltage range specified in this specification is 165V – 260VAC, frequency 50 Hz+/- 2Hz (means from 48 Hz – 52 Hz). Please amend the clause accordingly.	Kindly refer response to query at S.No. 154.
423	PART-2, SECTION-VI, VOLUME – 4, 13.7.6	Outdoor Signalling Cables and Outdoor Telecommunication Cables shall not be laid in same trench. If it is inescapable to lay Signalling Cables and Outdoor Telecommunication Cables in same trench, suitable separation shall be provided between the two as per the requirement of PS-Signalling Works, IRSEM and Indian Railway Telecommunication Manual and approved by the Engineer.	Most of the time, separate trenches for Signaling and Telecom are not feasible due to lack of space availability. Hence, It is suggested that to maintain uniformity across project, the outdoor Signalling and Telecom Cables in same trench may be permitted at all locations. Kindly confirm.	Kindly refer response to query at S.No. 155.
424	PART-2, SECTION-VI, VOLUME – 4, 17.1.8	Contractor shall liaison with designated authorities in Indian Railway to design Telecom Arrangement for/at boundaries with Indian Railways. The contractor shall execute the so approved Telecom Arrangement for/at boundaries with Indian Railways.	We understand that any extension of Telecom to IR shall end at DFCCIL / IR boundary and further extension will be carried out by IR, especially any excavation near the IR tracks / IR yard outside the DFCCIL boundary.	Kindly refer response to query at S.No. 156.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
			Please confirm.	
425	Clause 2.3.4.3 Page 172	Supply of Cab Radio complete with power supply, battery pack, antenna, software & accessories	No spares are to be provided as a part of Cab Radio Supply. Please confirm	Kindly refer response to query at S.No. 157.
426	Clause 8.6.3 Page 1012	Wherever the equipment of MTRC System being provided under Contract Package CP-304 is being upgraded / augmented / reconfigured, the same shall not in any way utilize available provision of expansion.	We understand complete new MTRC system needs to be proposed for CP-305 package. Kindly confirm	Kindly refer response to query at S.No. 158.
427	Clause 8.5.1.1 point 3 Page 1004	Voice Recording System (VRS) interfaced to above Network Sub-Systems (NSS) for recording voice communications taking place on RDC, Cab Radio and OPH. All voice communications of Radio Dispatcher Console, Cab Radio and Operation Radio shall be recorded by the Voice Recording System (VRS) being provided under Contract Package 304. The Contractor shall be responsible for upgradation/reconfiguration, if required, of Voice Recording System (VRS) being provided under Contract Package CP-304 to meet the requirement under this contract.	We understand VRS need not be supplied as part of Package 305 supply. Existing VRS needs to be integrated with new Network elements being proposed as part of Package 305. Kindly confirm	Kindly refer response to query at S.No. 159.
428	Caluse 8.3.6.5 Point 3 Page 995	The following call related services are to be supported for each type of mobile radio: Restriction of display of user identity	This is a network feature and should be removed from mobile handsets	Kindly refer response to query at S.No. 160.
429	Clause 7.5.4.1 Page 998	The VRS shall provide recording of stipulated voice conversations over Telephone System. It shall be a digital system providing sufficient capacity for recording up to 4 weeks before being overwritten. The VRS shall comply with the requirements as given below.	Kindly confirm if new VRS system needs to proposed for CP 305 or existing VRS system of CP-104, CP-105 & CP-203, CP-304 can be expanded to cater to CP 305 requirement as well.	Kindly refer response to query at S.No. 161.
430	Clause 7.5.4.1 Page 998	The VRS shall provide recording of stipulated voice conversations over Telephone System. It shall be a digital system providing sufficient capacity for recording up to 4 weeks before being overwritten. The VRS shall comply with the requirements as given below.	Please confirm the subscriber count and Active subscriber ratio in case new VRS system needs to be proposed	Kindly refer response to query at S.No. 162.
431	Clause 7.5.4.1 Page 998	The VRS shall provide recording of stipulated voice conversations over Telephone System. It shall be a digital system providing sufficient capacity for recording up to 4 weeks before being overwritten. The VRS shall comply with the requirements as given below.	We understand VRS system for GSM-R package is independent of other packages. This is applicable on the all packages CP-104, CP-105 ,CP-203, CP-304 & CP-305. Kindly confirm	Kindly refer response to query at S.No. 163.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
432	Clause 8.2.5.1 Point 5 Page 992	Upgradation/Augmentation/Reconfiguration of Radio Dispatcher Consoles and associated hardware/accessories, software and licenses provided under Contract Package CP-304 to meet the requirement of this Particular Specification;	Kindly confirm if new Radio dispatcher system needs to be proposed for CP 305 or existing Radio Dispatcher system of CP-304 can be expanded to cater to CP 305 requirement as well.	Kindly refer response to query at S.No. 164.
433	Clause 8.3.10.2 Page 997	Contractor shall also provide one Radio Dispatcher Console at TER in OCC at Allahabad. This shall be used for maintenance purposes.	Kindly confirm if new Radio dispatcher system (Quantity=1) needs to be proposed for CP 305.	Kindly refer response to query at S.No. 165.
434	Clause 8.1.2 (page 991) and Clause 8.5.1 (page 1004)	The system shall be designed based on European Integrated Railway Radio Enhanced Network (EIRENE)'s Functional Requirements Specification (EIRENE FRS v7.3.0) and System Requirements Specification (EIRENE SRS v15.3.0).	Understand that latest EIRENE specification shall be followed and used as specified in clause 8.5.1 and in GS	Kindly refer response to query at S.No. 160.
435	Form FIN 3.3, Section IV, Bidding Forms	Table for Financial Resources	We understand that we have to indicate the details of proposed sources of financing by way of Solvency Certificate. Kindly confirm our understanding.	Solvency certificate does not substantiate the means of finance, hence not acceptable.
436	ITB 29.8 of Bid Data Sheet and Sub-Clause 4.11 of Particular Conditions - Sufficiency of the Accepted Contract Amount	<p>The bidders may note that this DFCC project being funded by the World Bank, qualifies for exemption from payment of Customs Duty on goods supplied / intended to be supplied to the project in terms of Government of India's Notification no. 84/97 – customs dated 11.11.1997 (read with all subsequent amendments) However, while quoting the bid price, bidders are advised to ascertain exemptions of custom duty and / or availability of deemed export benefits for goods required as inputs for completion of the Works under the World Bank Funded Projects. The bidders are also advised to ascertain the availability of the custom exemptions for the goods supplied by their subcontractors used as input for the construction of Works. In this regard bidders' attention is also drawn to sub-clause 4.11 of the Particular Conditions.", Section VIII, Part 3 of the Bidding Documents."</p> <p>4.11 "DFCC project being funded by the World Bank, qualifies for exemption from payment of custom duty on</p>	<p>With the introduction of GST from 1st July, 2017, we understand that the benefit of deemed export benefit would be continued only to the extent of Basic Customs Duty &amp; Customs Cess. However, all other taxes applicable under GST Act would continue to remain applicable. Accordingly, Contractor would charge appropriate GST while raising invoice on DFCC. Similarly, please clarify that for offshore supplies, DFCC would be required to be clear goods under its own IEC and GSTIN, if any.</p> <p>For offshore supplies as well IGST would be payable in the name of DFCC. Please also clarify whether IGST So payable by DFCC is to be included in the contract price since payment of IGST upon customs clearance is a tax assessed on and payable by DFCC.</p>	<p>Since the contract price is inclusive of duties, taxes and other levies payable by the Contractor under the contract, or for any other cause, as of the date 28 days prior to the deadline for submission of bids, shall be included in the total Bid Price submitted by the Bidder as per ITB 29.8 of Bid Data Sheet.</p> <p>With introduction of GST from 1st July, 2017, the contract price shall include GST. All the offshore supplies shall be in the name of the Contractor only and NOT in the name of DFCCIL and IGST or any other tax shall be included in the contract price.</p> <p>Further please refer to Sub-Clause 1.13 (b) of the FIDIC General</p>

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
		<p>goods supplied/intended to be supplied to the Project in terms of Government of India's Customs notification no. 84/97 – customs dated 11.11.1997 (read along with all subsequent amendments), provided the goods brought in to the project are not withdrawn by the supplier or the Contractor. Under various notifications of the Department of Customs, Government of India, goods brought in to the project funded by the International Bank of Reconstruction and Development (IBRD) and / or awarded after conducting process under the International Competitive Bidding are exempt from Customs duties and / or are eligible for Deemed Export Benefits, provided the said goods are not withdrawn by the supplier or Contractor. The certificates required for claiming exemption of customs duty and / or for claiming deemed export benefits on goods by the Contractor shall be issued by the Employer. The Contractor shall be solely responsible for obtaining such duty exemptions and / or deemed export benefits and in case of failure to avail such benefits for any reasons whatsoever; the Employer shall not reimburse any such duties.</p> <p>The above stated certificate(s) shall be issued for the bonafide and reasonable quantities of goods to be used as input in the construction of Works, on the recommendations of the Engineer taking in to account the Work Programme [Sub-Clause 8.3 of the Conditions of Contract] and approved methodology. Any delay in procurement of the goods as a result of any delay, in the issuing of the above mentioned certificates and / or availing the exemptions, shall not be entertained as a reason for granting any Extension of Time for Completion and / or additional cost. No customs duty or any tax, fee, royalty etc. will be reimbursed by the Employer. The Bidders may please note that at present, there is no notification from Govt. of India regarding exemption of GST for this Project."</p>		<p>Conditions of Contract wherein it is stated inter alia that "the Contractor shall pay all taxes, duties and fees, as required by the Laws in relation to the design, execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so."</p> <p>Furthermore, it is clarified that no customs duty or any tax, fee, royalty etc. will be reimbursed by the Employer.</p>

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
437	Sub clause 14.1- Contract Price	"The Contract Price includes all duties, taxes, royalties, premiums for various insurances, licenses and fees that may be levied in accordance with the laws and regulations in force as on the Base Date on the Contractor's Equipment, Plant, Materials and supplies acquired for the purpose of the Contract and on the services performed under the Contract. Nothing in the Contract shall relieve the Contractor from its responsibility to pay any tax including any tax that may be levied in India on profits made by it in respect of the Contract."	Since GST is the applicable law in force for the purpose of indirect tax levy, Contract price would be required to be considered in accordance with the customs law and GST law. A confirmation to this effect would be highly appreciated.	All taxes including GST, as applicable on the Base Date, shall be included in the Contract Price.
438	Sub clause 14.2- Advance Payment	Mobilization Advance The Employer shall pay, on written request from the Contractor, an interest free Mobilization Advance up to (Ten) 10 per cent of the Contract Price. The Mobilization Advance shall be released in two installments as under: (a) Up to (Five) 5 per cent: On Submission of Performance Security and commencement of mobilization process; and (b) Up to (Five) 5 per cent: On Submission of the Inception Report and details of utilisation of initial Mobilization Advance of 5% to the satisfaction of Engineer. The Advance Payment will be released on submission of unconditional Bank Guarantee for an amount equivalent to the component of the advance payment requested by the Contractor.	Since the contract price is inclusive of all indirect taxes applicable for the project, 10% advance would be of the total contract price including the Taxes and Duties included in the contract. This is also in line with provisions under GST law which requires payment of GST on receipt of advance. Please confirm correctness of our understanding.	Advance is inclusive of GST and all other applicable duties and taxes.
439	Sub clause 14.1- Contract Price		Various State GST legislations provide for the road permits / way bills for facilitating the entry of goods into the DFCCIL site in the respective State. It is our understanding that all required road permits/ way bills etc would be issued by DFCCIL. Please confirm the same.	No road permits/E-way Bills shall be issued by DFCCIL.
440	Sub clause 14.1- Contract Price		We have the experience of executing Turnkey Design and build lump sum contracts funded by World Bank / JICA / Other Multilateral funding agencies wherein High Sea Sales are permitted and payments are made through LC. This is a standard industry practice in order to clear goods in the name of ultimate consumer of the goods. The mode of this transaction would be as follows: The bill of lading will be endorsed in the name of DFCCIL and ownership is transferred on high seas.	All materials for the Contract shall be procured by the Contractor in its name. No bills of lading will be endorsed in the name of DFCCIL.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
			Also, a high sea sale agreement is executed between DFCCIL and Contractor. The material is issued by DFCCIL to the contractor for the purpose of installation. The responsibility towards custody of such materials lies with contractor till the Taking over Certificate is issued by the Employer. The above high sea sale transaction shall enable the DFCCIL to avail Custom Duty exemptions. Please confirm whether Contractor can sale the imported goods on High Sea Sale basis to DFCCIL.	
441	Sec VIII Particular Conditions Sub Clause 14.9	"Delete first para of Sub-Clause 14.9 and substitute with the following: "A retention money amounting to 10 (ten) per cent of the value of the work done shall be deducted by the Engineer in the first and following Interim Payment Certificates, until the amount so retained reaches a limit of retention money of 5 (five) percent of the Contract Price. ...."	It is requested to modify the clause as under: "A retention money amounting to 5 (five) per cent of the value of the work done shall be deducted by the Engineer in the first and following Interim Payment Certificates, until the amount so retained reaches a limit of retention money of 5 (five) percent of the Contract Price. ...."	Provision(s) of the Bidding Documents shall prevail.
442	ITB 30.1 of Bid Data Sheet	The currency(ies) of the bid and the payment currency (ies) shall be as described below: a) The prices shall be quoted by the Bidder entirely in Indian Rupees (the name of the currency of Employer's country) and further referred to as "the local currency". A Bidder expecting to incur expenditures in other currencies for inputs to the Works supplied from outside the Employer's country (referred to as "the foreign currency requirements") shall indicate the percentage (s) of the Bid Price in the Appendix to Bid, Section IV, Bidding Forms, Part 1 of Bidding Documents, needed by him for the payment of such foreign currency requirements, limited to no more than three foreign currencies. b) For the purpose of conversion of foreign currency in to local currency i.e. Indian Rupees (INR) or vice versa, Bidders shall use the Reference Rates of Foreign Currency published by Reserve Bank of India ( <a href="http://www.rbi.org.in">www.rbi.org.in</a> ), on the Base Date (28 days prior to the last date of second stage bid submission) In case a particular currency rate is not published by Reserve Bank of India, then the selling rate of such	In line with the practices followed in many Design and Build Turnkey projects funded by World Bank/ JICA / Other Multilateral funding agencies, we request to permit as follows:  Each member of the un-incorporated JV will invoice for their respective portions in the quoted currencies under the covering letter of lead member of un – incorporated JV enclosing the invoices mentioning therein respective account nos.  It is requested to disburse payments directly to each member of the un – incorporated JV for their respective scope as per the designated accounts.  A clear billing breakup identifying the details of currency wise split up among the various members of by the un – incorporated JV shall be submitted along with second stage financial submission.	Please refer to Sub-Clause 14.7 of the General Conditions read with corresponding Particular Condition which is self-explanatory.



S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
		<p>currency shall be taken from the following internet web site on the Base Date:  <a href="http://www.oanda.com">http://www.oanda.com</a></p> <p>In case the exchange rates are not available on the above website also, then mid-market rate of such currency shall be taken from the alternate web site <a href="http://www.xe.com">http://www.xe.com</a> for the same date.</p> <p>c) In respect of procurement of goods and services from off shore sources Indian cost indices shall not apply but wholesale cost index for the relevant input of the respective country shall apply. In case a published index for such goods or services is not available, the wholesale prices index of relevant category of the respective country shall be used.</p> <p>The rates of exchange as mentioned above shall apply for all payments under the Contract so that no exchange risk will be borne by the successful bidder.</p>	<p>Issuance of TDS certificate in favour of the individual un – incorporated JV Members.</p> <p>Kindly confirm as these are standard practices in Design &amp; Build and Multilateral funded projects and moreover they are in line with RBI, FEMA, FERA and other financial regulations.</p>	
443	<p>G.C.C. - FIDIC Yellow Book 1999</p> <p>&amp; Section VIII. Particular conditions Clause no 18.3</p>	<p>The insuring Party shall insure against each Party's liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment]) or to any person (except persons insured under Sub-Clause 18.4 [Insurance for Contractor's Personnel]), which may arise out of the Contractor's performance of the Contract and occurring before the issue of the Performance Certificate.</p> <p>This insurance shall be for a limit per occurrence of not less than the amount stated in the Appendix to Tender, with no limit on the number of occurrences. If an amount is not stated in the Appendix to Tender, this Sub-Clause shall not apply.</p> <p>Unless otherwise stated in the Particular Conditions, the insurances specified in this Sub-Clause:</p> <p>(a) shall be effected and maintained by the Contractor as insuring Party,</p> <p>(b) shall be in the joint names of the Parties,</p>	<p>Kindly request you to have an aggregate limit for this liability or restrict the number of occurrences. It is impossible to have an insurance cover for unlimited liability.</p> <p>This clause mentions that the Insurance policy shall be in the joint names of the parties. Our proposal is to include DFCCIL as an additional insurer.</p> <p>Please confirm.</p>	<p>Provision(s) of the Bidding Documents shall prevail.</p>

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
		<p>(c) shall be extended to cover liability for all loss and damage to the Employer's property (except things insured under Sub-Clause 18.2) arising out of the Contractor's performance of the Contract, and (d) may however exclude liability to the extent that it arises from:</p> <p>(i) the Employer's right to have the Permanent Works executed on, over, under, in or through any land, and to occupy this land for the Permanent Works,</p> <p>(ii) damage which is an unavoidable result of the Contractor's obligations to execute the Works and remedy any defects, and</p> <p>(iii) a cause listed in Sub-Clause 17.3 [Employer's Risks], except to the extent that cover is available at commercially reasonable terms.</p> <p>PC 18.3 The insurance clause shall include a cross liability clause such that the insurance shall apply to the Employer, the contractor and Sub contractors (wherever applicable) as separately insured Minimum amount of third party insurance:- INR 100 million for any one occurrence.</p>		
444	Sub Clause 18.2 (d) Appendix to Tender	Minimum amount of deductibles for insurance of the Employer's risk is Zero Deductible.	It is requested to replace the word zero deductibles to minimum deductibles since such policy is not available and as per industry practice, the policy with minimum deductible is allowed.	Please refer to response to query at serial no. 44 above.
445	Sub Clause 4.2 & Appendix to tender	ESHS Performance Security	A requirement for submission of Performance Security is already existing. The insertion of ESHS submission is an additional requirement. It is requested to delete this requirement.	Provision(s) of the Bidding Documents shall prevail.
446	Sub clause 4.11 of Particular Conditions	"DFCC project being funded by the World ..... Employer, if applicable."	<p>Kindly Confirm on applicability of following Taxes:</p> <ul style="list-style-type: none"> <li>Withholding Tax on Off shore payment Building and other construction works.</li> </ul>	TDS as per applicable law shall be deducted on all offshore as well on shore payments. The Building and Other Construction Workers Act is applicable to the Contract.
447	Section –I -ITB Clause 4.1	Bidder may be a private entity or a government-owned entity—or any combination of such entities in the form of a joint venture, or association (JVA) under	In line with the practices followed in many Design and Build Turnkey projects funded by World Bank/ JICA / Other Multilateral funding agencies, we request to permit the proposed JV to be un –incorporated JV/	Please refer to response to query at serial no. 177 above.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
		an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a joint venture, or association: JVA all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms, and JVA shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the partners of the JVA during the bidding process and, in the event the JVA is awarded the Contract, during contract execution.	consortium wherein the members will have clear split among them with respect to scope of work & quoted prices. In this context, it will be the bidders responsibility to provide the clear cut scope split amongst them.  Kindly confirm.	
448	Appendix to Tender GCC 14.2	Mobilization Advance The Employer shall pay, on written request from the Contractor, an interest free Mobilization Advance up to (Ten) 10 per cent of the Contract Price. The Mobilization Advance shall be released in two instalments as under: (a) Up to (Five) 5 per cent: On Submission of Performance Security and commencement of mobilization process; and (b) Up to (Five) 5 per cent: On Submission of the Inception Report and details of utilisation of initial Mobilization Advance of 5% to the satisfaction of Engineer. The Advance Payment will be released on submission of unconditional Bank Guarantee for an amount equivalent to the component of the advance payment requested by the Contractor. Such Bank Guarantees can be split in to a maximum of 5 (Five) Bank Guarantees for each of 5% mobilisation advance (at the option of the Contractor) to be released on repayments. All such Bank Guarantee(s) shall remain effective until the advance payment has been repaid pursuant to the provisions of Sub-Clause 14.2 of the Conditions of Contract, but the amount thereof shall be progressively reduced by the amount repaid by the Contractor as indicated in Interim Payment Certificates issued in accordance with this Clause.	Request to confirm the "Mobilization Process" since the definition is not provided in the tender document	Please refer to response to query no. 169.
449	PC clause 1.9	"If the Contractor suffers delay and/or incurs Cost as a result of an error in the Employer's Requirements with reference to purpose, scope, design and /or other technical criteria for the works and an experienced	Request for clarification on the definition of "reasonable profit"	Provision(s) of the Bidding Documents shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
		Contractor exercising due care would not have discovered the error when scrutinizing the Employer's Requirements with respect to purpose, scope, design and/or other technical criteria for the works under Sub-Clause 5.1 [General Design Obligations], the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to: (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and (b) payment of any such Cost plus reasonable profit, which shall be included in the Contract Price.		
450	Price Adjustment Clause 13.8 Annexure I	Price adjustment not applicable for the following:- i) Surveys, Investigations, Studies, Design & Documents, O & M Manuals and As Built Drawings, Training of Staff ii) Integrated Testing, Commissioning and Final Taking over of Works iii) Design & Documentation Training	These costs have labour indices impact and hence would request to allow the price adjustment clause to these natures of heading in the price schedules in various sub-clauses.	Provision(s) of the Bidding Documents shall prevail.
451	Part 1 to 3, CI 8.2.8, Pg 498/1271	Minimum clearances to be adopted.  8.2.9 – 25 kV, dynamic clearances	The clearances indicated in the table are of non-standard and not as per EN 50119. In view of the above, it is requested to review the same and modify the requirements in line with EN 50119	The Provisions of the bidding document shall prevail.
452	Part 1 to 3, CI 8.4, Pg 501/1271	OHE Conductors – Contact wire	Please specify if the contact wire will be AC type or BC Type (Round bottom or Flat bottom)	Please refer response to query at S.N. 366.
453	Part 1 to 3, CI 8.7, Pg 505/1271	Flexible Jumpers and Feeder Connections	It is requested to please specify the tentative sizes of the Jumpers and Feeder connections	The Provisions of the bidding document shall prevail.
454	Part 1 to 3, CI 8.10, Pg 505/1271	Cantilever Assemblies	Safety factor of 2.5 for cantilever assembly has been requested in the Tender Specifications. As per EN 50119, CI 6.3, (Table 14) "Types of Structures and related load cases" only have to be considered. The safety factor requirement of 2.5 may please be explained.	The Provisions of the bidding document shall prevail.
455	Part 1 to 3, CI 8.10 Pg 505/1271	Cantilever Assemblies	The requirement of FEA Analysis for cantilever is not clear. We understand that any other similar or equivalent software can also be used for checking the proposed Cantilever design. Kindly confirm.	The Provisions in the Bidding Document are self-explanatory and shall prevail

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
456	Part 1 to 3, CI 8.19, Pg511/1271	The neutral sections shall be short PTFE type conforming to RDSO design.	It is requested to also consider alternate design if such designs comply to functional requirements.  Please confirm.	The Provisions of the bidding document shall prevail
457	Clause 8.15, Page 284/ 1271	8.15.1 Type tests shall be carried out on specific items to ensure that they perform their intended functions when subjected to all permutations and combinations of external environment and other factors. If Procured locally, shall be procured from RDSO/CORE approved sources only as per Indian Railway Policy. List of sources are available at RDSO / CORE websites.  8.15.2 In addition to the above, Type tests may also be performed for subsystems, components and items of equipment installed in the overall system in substantial numbers.  8.15.3 Type Test Reports and Certificates shall explicitly state the mandatory contents of the routine test Program and the individual inspection and measurement procedures that need to be performed on each individual item of identical series production devices or components.	Clarity is missing in clauses 8.15 towards the requirement of type test for those equipment which are already type tested from reputed institution under relevant standards for similar/higher rating and a certificate is available.  Kindly clarify.	The Provisions of the bidding document shall prevail
458	Clause 3.2.4 (9), Page 439/ 1271	Rail accessible & Touch Potential within safe limits under Normal & Fault Conditions including configuring earthing and bonding for the entire system (including those on adjacent structure and IR lines running parallel to DFC alignment); determination of sizes / Intervals of interconnection between AEW & BEC and their connection to mast/earth-station and rail without any compromise in safety of public/ Railway maintenance personnel even in case of OHE Short Circuit Fault while ongoing discontinuity in rail track system due to hair crack(s) as well as discontinuity in AEW;	Please confirm that fault conditions are not to be considered in adjacent structures and IR lines.  Please confirm that fault conditions as mentioned "discontinuity in AEW" OR "discontinuity in rail track system" are to be considered as single faults (n-1) on a healthy system. In case multiple faults are to be considered, please define in detail.  Please define "discontinuity in rail track system"; how many discontinuities are there in one section (from TSS to SP) with single tracks / 2 running rails.	Please refer Clause 8.20.1 and 8.20.3 of Vol-2, Part-2 of the Bidding Document. The provisions in the Bidding Document are self-explanatory and shall prevail.
459	Clause 3.3.4, Page 449/ 1271	CI No. 3.3.4 Proof Checking & Design Validation through an Independent agency	Please provide list of preferred agencies  Please define the design documents to be verified	The Provisions of the bidding document shall prevail
460	Clause 5.1.1, Page 463/ 1271 & Clause 5.1.9, Page 465/ 1271	Traction power supply system shall be capable of meeting the projected demand of the Train service with each TSS equipped to deal with exigencies due to outage of	Kindly share the configuration & chainages of TSS, SP & SSP of adjacent Bhaupur-Khurja Section for considering the outage scenario in the simulation model.	For CP-305, the adjacent sections are: CP-304 on one side and CP-105 on other side. The details of

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
		adjacent TSS of Sahnewal-Pilkhani Section, Dadri-Khurja Section and Bhaupur-Khurja Section.		both adjacent section have been given in the bid document.  Please refer Table 7.1.5 for adjacent section.  The Provisions of the bidding document shall prevail
461	Clause 5.1.7, Page 465/ 1271	<p>First failure conditions (N-1) performance requirement – Under Failure of One TSS, the power will be extended from the adjacent TSS. Traction power supply system shall be capable of meeting the projected demand of the services with each TSS designed to deal with exigencies from one adjacent TSS going out of service to facilitate extension of feed up to Neutral section of Outage TSS. Under first failure condition (N-1), full design headway/ train service shall be maintained without any loss of performance.</p> <p>The contractor shall identify and describe the conditions of all Single point Failure at TSS, SSP, SP and ATS (if any) and assess &amp; quantify the impact with requirement of Power rerouting and the energy requirement in kWh and MVA peak load.</p> <p>(1) All the equipment shall be sized considering the single point failure at the location and one TSS failure with required safety margins (in rating) to meet the application duty requirement of the most stringent power requirement without affecting the power quality.  (2) One TSS outage may persist continuously for a number of days until the defective equipment is replaced. The Single point Failure and TSS outage shall not use the overloading capacity of the equipment as prescribed by standards.  (3) The Traction transformer/ Transformers shall be rated for full capacity to meet the power requirement of the extended feed scenario.</p>	We understand that the Rated power of the Traction transformer shall be selected based on the load requirement of normal operating scenario whereas load requirement for (n-1) outage scenarios shall be catered with ONAF/ OFAF rating of the transformer. Kindly confirm the understanding.	The provisions in the Bidding Document are self-explanatory and shall prevail.
462	Clause 5.2.2, Page 466/ 1271	<p>Table 5.2.2: Train Operation plan</p> <p>Headway/Frequency – 17 min</p>	<p>In a single line system with bidirectional traffic, the term headway cannot be defined.</p> <p>Kindly delete.</p>	Please refer S.N. 02 of Addendum no. 08.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
463	Clause 6.3 (4), Page 474/ 1271	In all traction power supply control posts, MS rods, GI flats and pipes, allowing adequate margin against corrosion shall be used as per EN-50522 / IS 3043 in that order of priority as applicable and manual on sub stations issued by Central Board of Irrigation and Power. The earth rods below the mat shall be copper clad steel as per IEEE80/IEC62561-2/ANSI/NIMA Gr.-1-2007/EN50522-2. All the Earth mat joints shall be exothermic as per the requirements of IEEE80:2013. The connections shall be maintenance free, self-gripping type. Wherever the earthing bonds pass along or across the tracks, it shall be routed along the sleepers using proper fasteners and clamps / exothermic joint so as to avoid damages/ disconnection during ballast screening or tie-tamping of the track.	It is mentioned that "Earth rods below the mat shall be copper clad steel and all Earth mat joints shall be exothermic". Please note that using MS for main earth mat and Cu clad MS earth Rod below main earth mat is not advisable due to two dissimilar metals. As per IEEE-80 joints of earth rod shall be exothermic type where as joint with earth mat and earth mat joints can be achieved by various other methods such as welding in case of MS. Kindly confirm the MS rod acceptance and Welding instead of exothermic joints for earthing system as a whole.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor. The Provisions of the Bidding Document shall prevail
464	Clause 6.8.1, Page 477/ 1271	All switchgear and panels shall be vermin proof, constructed from mild steel finished with anti-corrosion paint. The proposed colours shall be submitted for review by Engineer. Anti-condensation heaters shall be supplied where necessary. Ingress Protection Class at a minimum shall be IP 65 for outdoor installations and IP 54 for indoor installations.	It is requested to modify the ingress protection class as per industrial practices for outdoor and indoor installations as under:  For Outdoor installation: IP 55 & For Indoor installations: IP 3X	The provisions in the Bidding Document shall prevail.
465	Clause 6.9.8 (c), Page 478/ 1271	132kV Traction Transformer Protection - Restricted Earth fault (REF) - Differential Protection - Over current Instantaneous / IDMT	Our understanding is that the protection requirement can be built in under single relay, rather than individual relays.  Applicability of "Restricted Earth fault (REF)" protection will be dependent on the type and vector group of the transformer selected by the vendor for the purpose.  Kindly confirm our understanding.	The provisions in the Bidding Document shall prevail.
466	Clause 6.9.8 (d), Page 479/ 1271	55/ 2x25kV LV side Transformer Protection: - Over current Instantaneous / IDMT - Differential Protection	Please confirm LV side Transformer Differential Protection may be implemented in the "Main Traction Transformer Protection" relay	The provisions in the Bidding Document are self-explanatory and shall prevail.
467	Clause 6.9.8 (f) & (h), Page 479/ 1271	The protection scheme shall meet to the requirements of EN 60076, EN 50119, IE Rules and ACTM and include the following protections as minimum but not limited to: (a) 132kV Loop in Loop Out Transmission Line Protection as required	As per our understanding, distance protection requirement under Para (f) and feeder distance protection requirement under para (h) are one and the same.	The provisions in the Bidding Document shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
		<ul style="list-style-type: none"> <li>- Under Voltage</li> <li>- Over current protection instantaneous and with time delay</li> <li>- Line Distance Protection</li> <li>-----</li> <li>(d) 55/ 2x25kV LV side Transformer Protection: <ul style="list-style-type: none"> <li>- Over current Instantaneous / IDMT</li> <li>- Differential Protection</li> </ul> </li> <li>(e) 55/ 2x25kV Bus Bar protection system <ul style="list-style-type: none"> <li>- Under Voltage Relay</li> </ul> </li> <li>(f) 55/ 2x25kV Feeding Bay Breakers <ul style="list-style-type: none"> <li>- Over current Instantaneous / IDMT</li> <li>- Distance Protection</li> <li>- Under Voltage Relay</li> </ul> </li> <li>(g) Auto Transformer Protection <ul style="list-style-type: none"> <li>- Over current Instantaneous / IDMT</li> <li>- Restricted Earth fault (REF)</li> <li>- Differential Protection</li> <li>- Internal faults Buchholz,</li> <li>- OTI &amp; A (H/L) and Oil Temperature Trip (H)</li> <li>- WTI &amp; A(H/L) and Winding temperature Trip(H),</li> <li>- Low Oil Level Alarm</li> </ul> </li> <li>(h) Feeder Protection <ul style="list-style-type: none"> <li>- Feeder Distance Protection ( as applicable to SP</li> </ul> </li> </ul>	Kindly Clarify.	
468	Clause 7.3 (2), Page 489/ 1271	<p><b>Fans and cooling pump shall be provided by the Employer in future.</b> However, one traction transformer shall be supplied complete with pumps and fans etc. For carrying out tests for ONAF and OFAF ratings. The Pumps and Fans set may be used at any TSS location as decided by the Engineer including the testing of other Traction transformers. However the Capacity of all the Traction transformers shall be demonstrated by The Contractor for full load based on the OFAF during FAT/site simulated conditions as desired by The Engineer.</p>	Kindly provide the details of fans & cooling pump provided by the employer.	<p>As already indicated in para 7.3 (2) of Vol-2, PS/Electrical, it is further clarified that Fans and cooling pump shall be provided by the Employer in future except one traction transformer which shall be supplied complete with pumps and fans etc by the Contractor."</p> <p>Being a design &amp; build contract General/Functional/ Performance requirement have been specified.</p>



S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
				The detailed design is in the scope of the contractor and shall be approved by the Engineer.
469	Clause 7.3 (1), Page 489/ 1271	The Insulation oil may be removed for transport and a nitrogen cushion employed during transportation.	We propose to use Dry Air instead of Nitrogen during transport for safety point of view, kindly confirm the acceptability of the same.	The provisions in the Bidding Document shall prevail.
470	Clause 7.5.3, Page 491/ 1271	Each circuit breaker shall have a control cabinet with an IP 65 Ingress protection.	We propose following Ingress protection class: For Outdoor installation: IP 55 & For Indoor installations: IP 3X Kindly confirm.	The provisions in the Bidding Document shall prevail.
471	Clause 6.6.1 (4), Page 476/ 1271 Clause 7.5.6, Page 491/ 1271	2x25kV switchgears connected with out of phase power supplies of 180 Degree apart, the rated voltage will be minimum 60kV. 25 kV circuit breakers / Interrupters shall be of vacuum type only	As per Clause no 6.6.1 (4) for 25kV switchgear 60kV rated voltage is asked; whereas in Clause no 7.5.6 vacuum type 25kV switchgear is asked. Please note that for 60kV class it is difficult to get vacuum type switchgear. Kindly confirm if SF6 Switchgear can be used.	The provisions in the Bidding Document shall prevail.
472	Clause 10.2.1(14), Part 2, Section VI, Volume 2, Page 518/1271	Provision of Web server with appropriate security (Firewall etc.) with capability for internet connectivity for access of HMI (only monitoring) from remote location, as require,	We understand that scope of supply of SCADA Software is under scope of CP-304 contractor., Therefore Web Server and HMI shall be under the scope of CP304 contractor. Please confirm.	The provisions in the Bidding Document shall prevail.
473	Clause 10.9.1(9) Part 2, Section VI, Volume 2, Page 530/1271	Additionally, the SCADA system shall include a data link to a maintenance Management system (MMS being developed by DFCCIL). This link shall enable the SCADA System to forward fault information to the MMS from all connected equipment to identify the location and nature of faults.	There is no communication Protocol specified for interfacing with maintenance management System. As per our understanding SCADA can exchange data to MMS system on OPC UA protocol. Please clarify.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor and shall be approved by the Engineer.
474	Clause 10.9.2(2) Part 2, Section VI, Volume 2, Page 531/1271	Optic Fiber Cable Ring shall serve as the back bone of whole data transmission network and the Servers at OCC will acquire all the information's pertaining to the RTU's over IEC 60870-5-104 protocol.	We understand that no separate Fiber ring is required for SCADA System, Fiber Ring Back bone shall be provided under telecom scope. Please confirm.	The provisions in the Bidding Document are self-explanatory and shall prevail.
475	Clause 10.10 (1).d Part 2, Section VI, Volume 2, Page 533/1271	The RTU shall be capable of communicating over IEC60870-5-104 with Control Center, IEC 61850 for interface with Relays, BCU, IEDs; IEC 60870-5-103 for interface with protection equipment; Modbus protocol for communication with Energy and Multifunction meters on Ethernet communication with Intruder Detection system and Access Control System.	We understand that relays, BCU and IED are all same. Hence it is requested to please clarify which protocol we should choose for Relays to RTU communication (i.e. IEC61850 or IEC 60870-5-103)	The provisions in the Bidding Document are self-explanatory and shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
476	Clause 10.11 & 10.12 Part 2, Section VI, Volume 2, Page 541/1271 to 551/1271	SCADA SOFTWARE & Network Management Software	We understand that scope of supply of SCADA Software is under scope of CP-304 contractor. Therefore, all requirement asked under this clause shall provided by CP-304 onboard contractor and CP305 is not responsible for same. Kindly confirm	The provisions in the Bidding Document are self-explanatory and shall prevail.
477	Safety Manual 26.6          26.11	Distribution System  v. Portable and hand tools - 115V single phase  vi. Site lighting - 115V single phase  Portable and hand-held equipment: The contractor shall ensure the use of double insulated or all-insulated portable electrical hand equipment may be used without earthing (i.e. two core cables), but they shall still be used only on 110V because of the risk of damage to trailing leads	is it acceptable to use  V. double insulated hand tools powered by 230 v single phase with a 30mA RCCB protection?  Vi: 230v single phase lighting mounted on movable frames controlled through a 30mA RCCB Is it acceptable to use double insulated hand tools powered by 230 v single phase with a 30mA RCCB protection?	The provisions in the Bidding Document shall prevail.
478	Safety Manual 26.7.3	The contractor shall provide sufficient ELCBs (maintain sensitivity 20mA)/RCCBs for all the equipment (including Potable equipment), electrical switchboards, distribution panels etc. to prevent electrical shocks to the workers.	Is it acceptable if the RCCB/ELCB is of 30mA sensitivity	The provisions in the Bidding Document shall prevail.
479	Vol-5 Particular Specifications E&M and Associated Works, clause no. 3.2	3.2 SCOPE OF E&M AND ASSOCIATED WORK The scope of works includes design, supply, manufacture, construction / installation, testing and commissioning of E&M and associated works for Station, Depot (IMD & IMSD), Tower Wagon Shed, Telecom equipment room in block section, Residential buildings for DFCC (except quarters to be constructed for IR) and other associated buildings on Khurja - Pilkhani section as under but not limited to:	It is requested to de scope the E&M works for the buildings which are being constructed by other Civil contractors to avoid interface and coordination issues in terms of construction. Civil contractor many complete the building and subsequent to that providing concealed conduit & cut-outs etc for E&M work will be rework for the Civil Contractor. Hence we request to limit scope of E&M works for CP305 contractor to the building constructed under CP305 contract only	The Provisions of the Bidding Document shall prevail
480	Volume 2, Particular Specifications– 2x25kV, AC Traction Electrification and Associated Works	Requirement of Buried Earth conductor	Being Design Build Contract, Bidder should be permitted to provide alternative Solution to BEC meeting all contractual requirements. Please confirm Bidder is permitted to provide alternative Solution to BEC Solution based on Simulation Study at project stage meeting all RFP requirements or Laying BEC is Obligatory.	Please see response at SN-24.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	3.2.4(4)(9)-Page 439 & 440 3.3.1(5) e-Page 442 3.3.1(7) -Page 443 4.4.2(5a) Page 454 6.2.2 Page 472 6.2.3(8) Page 472 6.3(e)- Page 474 8.1.1(3 c) -476 8.4(5)(6)-503 & 505 8.9 Page 505 8.20.1 – Page 511 8.21 -Page 512 13.2 Table 13.2.1(6&12) page 570 18.4.1, Table 18.4.1, 18.4.2, 18.4.5 Page 609 & 613			
481	Section III. Evaluation and Qualification Criteria Clause 2.1: Personnel	Social Expert requirement	In the key personnel requirement, details and CV of social expert is also required, However no details of works associated with social expert is provided in the tender document. Further we also understand that all land acquisition related works and environment simulation in under client scope, kindly provide the details of work associated with the requirement of Social Expert in this tender	The provisions of Bidding document shall prevail.
482	Section IV. Bidding Forms	PRICE SCHEDULE 2.1	Request DFCC to allow bidder to further sub-divide the cost centers provided in the tender documents into sub cost centers to facilitate the invoice generations/Payment purpose.	The provisions of Bidding document shall prevail.
483	Part 2, Section VI, Volume 1 General Specifications:	(4) The Contractor shall make its own arrangement of space for storage facility. However, if the spare land is available with the Employer, the same will be handed over to the Contractor free of cost, for the purpose of establishing temporary construction depot(s) with the condition that whenever the Employer requires this portion	Clause 8.3.2 (4) specifies that if the spare land is available with the employer, the same shall be handed over to contractor for establishing temporary construction depot. Since now most of the land is already acquired by DFCCIL for this Project, request you to kindly confirm the availability of the land for the purpose at the bid stage	The provisions of Bidding document shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	Clause 8.5.3 Handling, Storage and Delivery	of land back, the same shall be handed over by the contractor at a month's notice at no extra cost/compensation to the Contractor.	itself to correctly estimate the cost. Since Site establishment add to a significant cost, DFCCIL is requested to remove ambiguity and bring clarity if the land will be made available to the contractor and probable location of such land.	
484	Part 1 / Section III Evaluation and Qualification Criteria / Clause 2.3 /Page No. 51 of 1271  Part 1 / Section IV Bidding Forms /Form PER-1 (Para 2.3 of Section III) / Page No.101 of 1271	* Minimum 3 (three) years outside India experience in at least one Project  ** Minimum 5 (five) years outside India experience in at least two Projects	It may be noted that it is an Indian project and the mentioned scope is similar as Indian Railways electrification & power supply projects. The expertise required to execute such projects is available in India and can be exhibited clearly through experience in Indian projects. Therefore, we feel that the requirement of overseas experience for the key personnel is not required.  Moreover, Such requirement shall force Bidders to consider Expats which will increase the project cost.  So, we request you to remove the requirement of Overseas Experience specified against key positions for Personnel.	The provisions of Bidding document shall prevail.
485	Part 1 / Section IV Bidding Forms / Price Schedule / Page No. 174 of 1271	Price Schedule	We observed that the Price Schedule for MTRC system is missing. Kindly provide the price schedule for –  1. Supply, Installation, Integrated & Commissioning of MTRC  Also include the same in Cost center 2.3.	The provisions of Bidding document shall prevail.
486	Part 2 I Section VI / Volume 5 / Particular Specifications - E&M and Associated Works / Clause 17.5.3 / Page 1185 of 1271	It may be noted that the roads within the TSS, SSP & SP (including that for ATS Provided if any) as required shall be bitumen concrete (BC) and constructed by Contractor CP-305 to permit transportation of all heavy equipment. The roads shall have minimum 5 meter wide RCC road. Road construction shall be as per IRC standards.	The paragraph is contradictory and does not clear whether BC Road or RCC Road is to be considered.  Kindly clarify.	Please refer SN- 24 of Addendum no. 08.
487	Part 2 / Section VI / Volume 5 / Particular - E&M and Associated	Plinth level of Buildings away from the track alignment:  The Contractor shall collect the Highest Flood Level (HFL) from Metrology / Irrigation' other statutory Govt. Body for constructing the other Buildings not in proximity of	The Bid document does not clarify the Plinth level of the Buildings which are close to the alignment.	The provisions of Bidding document shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	Works Specifications / Clause 7.8.3 / Page 495 of 1271	DFCCIL's track. The Plinth level for such Buildings shall be at least 600mm above the Highest Flood Level (HFL) or 900mm above the natural ground whichever is higher.	Hence, we understand that contractor should consider the same criteria mentioned for the Buildings away from the alignment.  Kindly Confirm.	
488	Part 2 / Section VI / Volume 2 / Particular Specification - 2x25kV, AC Traction Electrification and Associated Works / Clause 5.1.2 / Page No. 463 of 1271	For the purpose of Power supply reliability, double circuit 132kV Power supply has been planned to be tapped from Indian Railways' transmission line network for all the Traction Sub Stations (TSSs) installing 132kV bays incomer CBs, Bus coupler Circuit Breakers and Transformer Circuit breakers etc.	We understand that LILO Arrangement is to be provided at all the Three Traction Sub Station New Hapur, New Sakoti and New Talheri Buzurg.  Kindly Confirm our understanding.	The provisions of Bidding document shall prevail.
489	Part 2 / Section VI / Volume 2 / Particular Specification - 2x25kV, AC Traction Electrification and Associated Works / Clause 6.1.3 / Page No. 469 & 470 of 1271	132 kV Incomer isolators with / without earthing heels and Double pole isolators, suitable for 2X25 KV AT feeding system	We understand that 132 KV TP and DP Isolators shall be manual operated and 2 x 25 KV DP Isolator shall be motorized operated.  Please confirm our understanding.	Bidder's understanding is correct.  The provisions of the Bidding document are self-explanatory and shall prevail.
490	Part 2 / Section VI / Volume 2 / Particular Specification - 2x25kV, AC Traction Electrification and Associated Works / Clause 7.1.3 / Page No. 485 of 1271  Part 2/Section VI / Volume 2/Particular	Sectioning Switches (Interrupters) shall be provided for mainline appropriately placed, at stations to permit receiving & dispatch of the Trains and isolating the faulty section ahead and limit the length of faulty sections. The Contractor shall make his own General Supply Diagram with Sectioning Arrangement included in the reference drawing under Part-4 of the bidding document	We understand that the Sectioning Switches are only pole mounted switch gears in the yard and there will not be any requirement of having a control room building and secured fencing for the same.  In such case there will not be any requirement of additional Auxiliary Transformers at SS locations, as mentioned in table 10.1.1.  Kindly Confirm.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor. The Provisions of the Bidding Document shall prevail.

S. N.	Ref. to Bid Documents	Brief Description of Clause / Para No.	Query Raised	Employer's Response
(1)	(2)	(3)	(4)	(5)
	Specification - 2x25kV, AC Traction Electrification and Associated Works / Clause 10.6.1 / Table 10.1.1 / Page No. 525 of 1271			
491	Part 2 / Section VI / Volume 2/Particular Specification - 2x25kV, AC Traction Electrification and Associated Works / Clause 10.6.1 / Table 10.1.1 / Page No. 525 of 1271	Indicative List of Equipment to be Monitored and Controlled at Remote Location	We understand that the switchgears are SS locations shall be Monitored and Controlled by RTU located at Station Buildings.  Kindly Confirm our understanding.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor. The Provisions of the Bidding Document shall prevail.
492	Part - 4: Reference document, Clause No. 1.4, Indicative Yard Plan and Other drawings.	Indicative Yard Plan and Other drawings	Kindly Provide the Following Missing drawings-  1. New Mohiuddinpur (DFC / MTC/ NEW HAPUR/Y- 3/2016)  2. New Meerut Cantt (DFC/ MTC /NEW MEERUT CANTTIY-5/2016)  New Deoband (DFC/ MTC/ NEW DEOBANDIY/10/2016)	The drawings in question are available on the DFCCIL website and can be opened with Adobe Acrobat Professional.  However, hard copies of the Yard Plan and Other drawings can be collected from DFCCIL office.

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