**CLARIFICATION #III**
**FOR**
**PROCUREMENT OF PLANT DESIGN, SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF LOT 1: 400 KV RATMATE SUBSTATION AND WORKS AT LAPSIPHEDI AND NEW HETAUDA SUBSTATIONS, LOT 2: 400 KV NEW BUTWAL SUBSTATION, LOT 3: 400 KV NEW DAMAULI SUBSTATION**
**Ref No: MCA-N/ETP/CB/004**
**Issued on: 17 July 2023**

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| 1. | General | The bidder is requesting a time extension of two weeks from the last date of submission i.e., 17th May 2023 for submission of queries. | Please refer to Addendum #5. The deadline for Bid Submission is extended until 04 September 2023. |
| 2. | Section III, Qualification and Evaluation Criteria<br>Sub-factor 16: Similar Construction Experience<br>*"All contracts should have features similar to the proposed plant and services. The similarity shall be based on the physical size, complexity, methods/technology or other characteristics as described in Section V, Employer's requirement"*<br>*And*<br>*"at least one (1) of them being outside the contractor's home country."* | We have understood that any one of the credentials submitted against clause no.16.a or 16.b. or 16.c or 16.d should be outside the contractor's home country. Also we have understood that the credential to be shown against the referred clause may not mandatorily require more than 20 MUSD value or voltage grade of 380kV and above and GIS type. **Please confirm**.<br><br>For example, if we have executed any substation project of 132kV AIS or GIS having value 15M USD outside our Home Country but having similar scope like Design, Engineering, Supply, Erection, Testing & commissioning then this experience will be considered as meeting the | Please refer to Addendum #2. This requirement of Similar Construction Experience was amended.<br><br>There is no requirement of home country under 16. Similar Construction Experience. |

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| | | qualification requirement. | |
| 3. | Section III, Qualification and Evaluation Criteria<br>Sub-factor 16: Similar Construction Experience (a) | We have understood that the value of the Projects indicated in the referred clause may be of GIS or AIS type. Please confirm. | Yes, for 16 (a) experience in GIS or AIS type is acceptable. |
| 4. | Section I. Instruction to Bidders<br>Conflict of Interest 5.8 (d) | It is not clear from the conflict of interest clause that if the GIS Manufacturer cum EPC Bidders participating as lead bidder or JV partner for any one or multiple lots for the said package whether can participate or submit credential as a subcontractor to other EPC bidders. This point was raised during pre-bid meeting and MCA clarified as below:<br>Participating OEM can provide Manufacturer's Authorization to other EPC bidders. Please confirm. | Please refer Letter of Technical Offer point 7, which states "We are not participating, as a Bidder or as a subcontractor, in more than one Bid in this bidding process in accordance with ITB Sub-Clause 5.8 (d)." Thus, OEMs can be a Bidder and Supplier for other Bidders but cannot be subcontractor. For further clarity, please also refer Addendum 4. |
| 5. | Section III, Qualification and Evaluation Criteria<br>D. Technical Evaluation Criteria for each Lot<br>Sub-criteria 1.4 | We presume that "Four Projects" is a typographical error only. May please be changed the referred clause as Similar Construction Experience in 380kV or above GIS Substation Construction in minimum three projects instead of four projects. | This is not an error. |
| 6. | Section III, Qualification and Evaluation Criteria<br>*Experience* | Considering this as a turnkey contract, we understand employer will only consider the experience of bidders which includes the supply of all the equipment. Please confirm. | The Question is not clear.<br>Based on our understanding of the question, the response is as follows:<br><br>The Contract will be based on FIDIC Conditions of Contract for Plant and Design-Build for Electrical and Mechanical works and for Building and |

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| | | | Engineering Works designed by the Contractor, 1999 edition.<br><br>Section III has various experience criteria. Experience meeting the criteria will be considered for evaluation. For meeting the requirement, the bidder must demonstrate that they have required experience. For obtaining higher marks, the bidder needs to exceed the requirement. Please refer A6. Technical Evaluation *Framework under Section III.* To qualify, the Bidders must sattisy also the requirement for Equipment stated in the Bidding Document. |
| 7. | Section III. Qualification and Evaluation Criteria<br>16. Similar Construction Experience. Subclause: a. | We understand that the experience of both GIS & AIS substations of 400kV and above voltage level will be considered for qualification. Please confirm. | Yes, for 16 (a) experience in GIS or AIS type is acceptable.<br><br>Please note that for "*16 (b) Participation as single entity or as joint venture partner in at least two (2) turnkey contract/design and build constructing GIS substations of voltages 380kV or above and 50 kA short circuit level or higher and the same should be in successful operation for each lot. To be eligible for an award of more than one lot, the bidder needs to satisfy the total requirements for the lots in consideration.*" GIS experience is a must. |

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| | | | The bidders can qualify for all three lots if the bidder satisfy the aggregate qualification requirement for all three lots. Please refer provisions under Section III for multiple lots. |
| 8. | Section I. ITB - Conflict of Interest - 5.8.d | We understand that manufacturer supporting as supplier to other EPC bidder can participate as a bidder in the tender and the same will not be considered as a conflict of interest.<br>Please confirm | Please refer Letter of Technical Offer point 7, which states "We are not participating, as a Bidder or as a subcontractor, in more than one Bid in this bidding process in accordance with ITB Sub-Clause 5.8 (d)." Thus, manufacturer 's can be a Bidder and Supplier for other Bidders but cannot be subcontractor. |
| 9. | *Not Used.* | | |
| 10. | Part 2: Employer's Requirements Section V – B0 (Project General Description)<br>11 Environmental and Social Requirements | We understand that land acquisition for Ratmate substation was 99% completed by the time NIT was published.<br><br>Please confirm whether proposed substation can be constructed with already acquired land i.e., 99% of proposed land.<br><br>We would like to bring it to your notice that works for NEA Lapsiphedi substation is stuck as land acquisition is not completed yet. In case of similar delay in completion of land acquisition for Ratmate substation, please confirm following:<br><br>1. Supplied material will be taken over by Employer as per price schedule. | The issues will be dealt as per Contract provisions and as per actual situation during implementation. |

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| | | 2. Cost incurred by contractor for stay, insurance, bank guarantees, and other relevant cost shall be reimbursed by Employer. | |
| 11. | ITB 3. - Fraud & Corruption, Page: 13-16 *Subclause 3.1*<br><br>Section VII. Particular Conditions of Contract, Page: 241-244 *Clause 15. Termination by Employer Subclause 15.6 – Fraud & Corruption Requirements*<br><br>Section IV. Bid Submission Forms, B. Financial Offer Forms, Page: 188 – 190 *Letter of Financial Offer*<br><br>Appendix to Letter of Financial Offer – 1.4 – Laws and languages, Page: 192<br><br>MCC AFC Policy – 3. Authorities, Page: 3 | We understand that "MCC AFC Policy" has been prepared based on all authorities mentioned under "Clause-3: Authorities".<br><br>As per the letter of financial offer, Bidders must acknowledge notice of the "MCC AFC Policy" on Preventing, Detecting and Remediating Fraud and Corruption in MCC Operations and certify "(a) The prices in this offer…….(b) The prices in this offer……..(c) No attempt has been……..purpose of restricting competition."<br><br>As per Clause 1.4, "Appendix to Letter of Financial Offer"" regarding Laws and Languages, the contract shall be governed by the law in force in the Federal Democratic Republic of Nepal. This law shall be applicable to all Bidders/Contractors involved in the project.<br><br>Further, we understand that the authorities / acts mentioned in FCA Policy (1. Millennium Challenge Act of 2003, as amended (22 U.S.C. §7701, et seq.); 2. Foreign Corrupt Practices Act of 1977, as amended (15 U.S.C. §78a, et seq.)) are applicable to US nationals and US companies only. This policy is provided for reference purposes only, and it does not have any legal | MCC requires that all beneficiaries of MCC Funding, including the MCA Entity and any applicants, bidders, suppliers, contractors, subcontractors, consultants, and sub-consultants under any MCC-funded contracts, to observe the highest standards of ethics during the procurement and execution of such contracts. MCC Policy on Preventing, Detecting and Remediating Fraud and Corruption in MCC Operations ("MCC AFC Policy") is applicable to all procurements and contracts involving MCC Funding and can be found on the MCC website. This Policy requires that companies and entities receiving MCC Funding acknowledge notice of MCC AFC Policy and certify to the MCA Entity that they have acceptable commitments and procedures in place to address the potential for fraud and corruption.<br><br>Law in force governing the procurement and subsequent contract entered under this procurement is that of the Federal Democratic Republic of Nepal |

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| | | binding to the Contractor. However, fraud and corruption prevention, detection, and remediation shall be governed by the law in force in the Federal Democratic Republic of Nepal.<br><br>Please clarify above.<br><br>Considering the fact that all countries have their own Anti Bribery and Anti Corruption laws on their own which are at part with provisions provided in the MCC AFC police, Therefore, We hereby kindly request that you amend the "Letter of Financial Offer" and Other Bid Forms, which currently reference the Millennium Challenge Act of 2003 and the Foreign Corrupt Practices Act of 1977 through the "MCC AFC Policy", to align with the equivalent law in force in the Federal Democratic Republic of Nepal and the country of registration of the Bidder." | |
| 12. | Technical Specification: (All Lots)<br>Chapter 9: Civil Works Specification<br>Section 1: General Civil works Specification<br>19.BRITISH STANDARD CODES | As per technical specifications -"for design and engineering relevant BS codes or equivalent International standards shall be referred by the Bidder". Bidder seeks confirmation from Owner on acceptance of Indian Standard Codes for design and construction as the same is already followed in Substation projects of Nepal. Kindly confirm. | Codes to be followed shall be as per Employer's Requirement and shall be subjected to agreement by the Engineer at the design stage. |
| 13. | For all Lots<br>Part 2: Employer's Requirements<br>Section V – B1 (Technical Specifications) | The Bidder understands that they are free to design the number of floors for the Control Room Building (G or G+1 type). Kindly confirm. | Confirmed. However, the design is subject to the approval of Engineer during the execution stage. |

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| | SECTION 2: BUILDINGS SPECIFICATION<br>*2.1 Control Room Building* | | |
| 14. | B11_PSR: Lot 1<br>SITE PLAN RATMATE 400/220/132/33kV SUBSTATION<br><br>132 kV GIS Building | The Bidder understands that the 132 kV GIS Building as shown in the Site Plan is not part of this package neither in base nor in option. Kindly confirm. | Confirmed. However, site grading and levelling for the same will be in the current scope of works. |
| 15. | B11_PSR: Lot 1<br>SITE PLAN<br>RATMATE 400/220/132/33kV SUBSTATION<br><br>Parking | The Bidder seeks confirmation on the number of parking areas as there is conflict in the site plan (2 Nos.) and price schedule (1 Nos). Kindly confirm the number of parking areas required. | 2 nos. of parking areas are envisaged. |
| 16. | B11_PSR: Lot 1<br>GRADING PLAN<br>RATMATE 400/220/132/33kV SUBSTATION<br><br>Cutting Filling Qty | The Bidder understands that the cutting filling qty calculated in the grading plan of the tender document extends beyond the substation fence area and there is considerable increase in the qty due to deep pit at one side of the substation. Bidder seeks confirmation that they have to do land development only within the substation fencing area. This shall be applicable for all the Lots. Kindly confirm. | Confirmed, land development shall be done within the footprint of the substation. |
| 17. | For Ratmate Lot 1<br>Price Schedule No. 4.2: Breakdown of Earthworks<br>Item No 4.3.2.1 Improvements of existing earthen access road to asphalted road up to substation | Bidder understands that the existing approach road (kacha road) connecting State Highway does not require any strengthening and the same is not a part of Price Schedule. The Price Schedule item is specifically for the 2 connections of this approach road to the substation area that is total approx. 700 m. Kindly confirm. | The Approach roads:<br>i) Upgrade of about 0.7km of the existing gravel road to asphalted road is provided in Site Accessibility table of GPD under access improvement cell and the same is provided in the price schedule of item no. 4.3.2.1.<br>ii) Construction of new approach road which is continuation of the main approach road (existing road) up to the |

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| | | | substation needs to be included in the price schedule of item no. 4.3.2.2 |
| 18. | For Ratmate Lot 1<br>Price Schedule No. 4.2: Breakdown of Civil Works<br>Item No 4.3.2.14 River Protection Works | The Bidder seeks specific requirements of this item as to what type of structure is required and up to what length we need to consider the protection works. As there is no river nearby the substation the Bidder understands that this is required to protect substation from water ingress from upstream hill side. | Protection works could be of RCC/Gabion/RRM or any suitable type subject to approval of Engineer. |
| 19. | For New Butwal Lot 2<br>Price Schedule No. 4.2: Breakdown of Civil Works<br>Item No 4.3.2.14 River Protection Works | The Bidder seeks specific requirements of this item as to what type of structure is required and up to what length/height we need to consider the protection works. As there is no river nearby the substation the Bidder understands that this is required to protect substation from water ingress from upstream hill side. | Kindly adhere to the requirement of bid. |
| 20. | For Damauli Lot 3<br>Price Schedule No. 4.2: Breakdown of Civil Works<br>Item No 4.3.2.7 River Protection Works | The Bidder seeks specific requirements of this item as to what type of structure is required and up to what length/height we need to consider the protection works. The Bidder needs confirmation on the High Flood Level to be considered in order to determine the height of the protection wall. Kindly provide the relevant information. | Protection works could be of RCC/Gabion/RRM or any suitable type subject to approval of Engineer. |
| 21. | General-Ratamate<br>Disposal of Debris | The Bidder seeks confirmation on the disposal of debris which are formed due to dismantling works of building/other structures carried out by Owner for site clearance. The same shall be disposed by the Owner. Kindly confirm. | Disposal of the debris is in the scope of the Contract. Bidders are suggested to refer Part 2: Employer's Requirements Section V – B0 (Project General Description) for further clarifications. |
| 22. | Lot 2 New Butwal<br>Price Schedule No. 4.2: Breakdown of Civil Works | As per the site visit, the Bidder noticed that there is existing fencing for 220 kV AIS S/s of NEA and one side is common for 220 kV AIS NEA and | Confirmed. Any existing fencing/boundary wall, structure etc., if needed to be demolished temporarily, during the |

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| | Item No 4.3.2.9 Substation Perimeter Fence | upcoming 400 kV GIS MCA. Does bidder needs to consider fencing for this common side under this package or not. Kindly confirm. | construction works needs to be refurbished. |
| 23. | For All Lots<br>Chapter 9: Civil Works Specification<br>Section 1 : General Civil works Specification<br>7. RAINWATER HARVESTING: | Bidder seeks confirmation on which Price Schedule item this activity shall be paid. Kindly confirm. | MCA-Nepal may issue an addendum to include the rainwater harvesting in the Price Schedule subject to the approval of Authority. However, please note that the purpose of price schedules is to identify the Bid Price which will be used to determine progress payment. The Bidder shall quote the price under the Price Schedule required to carry out Work stated under Employer's Requirements (including technical specifications) based on the Conditions of Contract.. |
| 24. | For All Lots<br>CHAPTER 9 : CIVIL WORKS SPECIFICATION<br>SECTION 1: GENERAL CIVIL WORKS<br>SPECIFICATION , Cl 15.1 | It is mentioned in the said clause that Hydrology study shall be carried out by the contractor. We request MCA to finish the Hydrology study report, if available to design and construction of river protection works | Hydrology studies for New Damauli and New Butwal Substation is in the scope of the Contractor. This is the specific requirement of the Project. Bidders are requested to kindly adhere to the requirement of the bid. |
| 25. | For All Lots<br>CHAPTER 9 : CIVIL WORKS SPECIFICATION<br>SECTION 1: GENERAL CIVIL WORKS<br>SPECIFICATION , Cl 15.2 | We request MCA to furnish Project specific environmental guidelines for social impact assessment. | Bidders are requested to refer to the ESHSMP guidelines/ Project Specific EIA/ ESIA and relevant guidelines and protocols of GoN, IFC etc. for social & environmental assessment. |
| 26. | CHAPTER 9 : CIVIL WORKS SPECIFICATION<br>SECTION 1: GENERAL CIVIL WORKS | As per the clause, all steel sections and fabricated structures which are required to be transported on sea shall be provided with anti-corrosive paint to take care of sea worthiness. We presume that the | There is no need for the protective paint on galvanized structures. However, the galvanized structures have to be protected |

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| | SPECIFICATION , Cl 16.c for Lot 2 and Lot 3 and Cl 15.c for Lot 1 | above clause is not applicable for Galvanized structures. Kindly confirm | against white rust, which may occur in humid environments. |
| 27. | CHAPTER 9 : CIVIL WORKS SPECIFICATION<br>SECTION 1: GENERAL CIVIL WORKS<br>SPECIFICATION , Cl 16.f for Lot 2 and Lot 3 and Cl 15.f for Lot 1 | As per the clause, Bricks having minimum 75 kg/cm2 compressive strength can only be used for masonry work. Since the brickwork of buildings are non-load bearing type, we propose to use bricks with 50 kg/sq.m compressive strength.<br>Kindly confirm | Kindly adhere to the requirement of the bidding document. |
| 28. | CHAPTER 9 : CIVIL WORKS SPECIFICATION<br>SECTION 1: GENERAL CIVIL WORKS<br>SPECIFICATION , Cl 16.i for Lot 2 and Lot 3 and Cl 15.i for Lot 1 | Bidder understands that the edge angles are applicable for side walls of cable trenches and not for the precast covers. Kindly confirm | The edge angles are applicable for the precast covers and side walls of cable trenches. |
| 29. | Not Used. | | |
| 30. | CHAPTER 9 : CIVIL WORKS SPECIFICATION<br>SECTION 1: GENERAL CIVIL WORKS<br>SPECIFICATION , Cl 16.p for Lot 2 and Lot 3 and Cl 15.p for Lot 1 | Bidder understands that Sulphate Resistant Cement is not applicable as the same is not recommended in Geotechnical Investigation Report.<br>Kindly confirm | Requirement of Sulphate resistant cement (SRC) for sub structural works shall be decided in accordance with the International/BS Standards/IS Codes based on the findings of the detailed soil investigation to be carried out by the Contractor. |
| 31. | For All Lots<br>CHAPTER 9: CIVIL WORKS SPECIFICATION<br>SECTION 2: BUILDINGS<br>SPECIFICATION, Cl 3.a.i | As per the clause, the building design shall conform to the requirements of the National Building Code of India and the National Building Code of Nepal, and the standards quoted therein. Bidder Understands that the Design of civil and structural works of Substation shall be as per the | Codes to be followed shall be as per the TS based on mutual agreement during implementation. |

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| | | relevant Indian Standards with Major codes as mentioned below. Kindly confirm.<br><br>1. Design of dead, live and wind loads: IS 875<br>2. Seismic loads: IS 1893 (Part I)<br>3. RCC design: IS 456<br>4. Switchyard Structure design: IS 802<br>5. Switchyard foundation design: IS 1904 and IS 4091<br>6. Reinforcement detailing: SP 34" | |
| 32. | For All Lots<br>CHAPTER 9: CIVIL WORKS<br>SPECIFICATION<br>SECTION 2: BUILDINGS | As per Indian national building code, expansion joint is to be provided for RCC buildings if the length exceeds 40 m. Kindly confirm whether this clause is applicable or not. Bidder also proposes to design square type control room building instead of rectangular type 50x25 m to avoid expansion joint.<br>Kindly confirm. | The actual design of the control building is part of contractor's scope, subject to approval by the Engineer. The dimensions shown on the drawings are for information only. |
| 33. | Site Queries | <u>Ratmate Substation Site:</u><br>Construction of State Road Connecting between National Highway and Site<br>  | Bidders are requested to refer to accessibility table presented in Clause 5 Site Accessibility, Part 2: Employer's Requirements, Section V – Project Description & General Project Requirements. |

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| | | During site visit bidder observe that State Road is partially asphalt pitched approx. 20-40 mtrs. Afterwards it is Kutcha Road.<br><br>Bidder understand Construction of State Road is not is scope of the Work. Please confirm. | |
| 34. | Site Queries | Ratmate Substation Site:<br>Since it is Design Built Contract, Bidder seeks confirmation to choose the location of both approach road connecting State Road to the Site.<br><br>Please confirm. | Bidders are requested to refer to accessibility table presented in Clause 5 Site Accessibility, Part 2: Employer's Requirements, Section V – Project Description & General Project Requirements. |
| 35. | Site Queries | Ratmate Substation Site:<br>Bidder understand that dismantle of existing all Residential and Storage area within the Substation area shall be in MCA - Nepal Scope. Encumbrance free land shall be handed over to the bidder before site mobilization.<br><br>Please confirm. | There is no building inside the substations footprint. However, please note that all the site clearance work inside the substations footprint falls under this contract scope of works. Furthermore, please note that the Contractor will have the responsibility to acquire or lease the land at his cost for its temporary office, laydown area and storage yards at appropriate locations consistent with its deployment and work performance strategy / locations. Contractors are advised to refer Part 2: Employer's Requirements, B01_GPD for better clarifications. |
| 36. | Site Queries | Ratmate Substation Site:<br>During Site visit. MCA - Nepal it is observed that 11kV Overhead line is passing through the Land as shown for the Substation Construction works. | Site clearance and development including shifting of the 11kV overhead line, if required, is in the scope of the contractor. |

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| | | MCA Nepal will be shifting the 11kV Overhead line from the Site. Please confirm. | |
| 37. | Site Queries | Ratmate Substation Site:<br>During Ratmate Site visit it is observed that there is possibility of Local habitat intervention/ objections, Local unrest/ Community gathering etc.<br>MCA Nepal will provide necessary control & mitigation for smooth execution of project. Please confirm. | Contractor will be primarily responsible to resolve issues to ensure smooth execution of works at the site. MCA-Nepal will facilitate, if required. |
| 38. | Site Queries | New Butwal Substation Site:<br>As per site visit Bidder understands that the existing Residential Area & charged 220 kV area shall be separated from the new construction using temporary fencing. Bidder requests MCA - Nepal to provide the specific requirements like<br>1) What type of barricading required and how many sides?<br>2) Height of Barricading<br>3) In what price schedule item this will be paid. | The contractor shall be responsible for planning the most effective use of the available spaces and shall determine the layout of its temporary site facilities, site offices, access roads and security fences within its assigned area while considering the planned workforce for all its Work activities. The payment for the same is deemed included in the scope of works of the Contract. |
| 39. | Site Queries | New Butwal Substation Site:<br>Bidder is responsible for Approach Road within NEA premises. Bidder will dismantle the existing Boundary wall for Approach Road and after completion of project the same dismantle Boundary wall shall be restored. Please confirm. | Bidder is responsible to construct the approach road, dismantling of the boundary and maintenance/restoration required is also in the scope of the contract. |
| 40. | Site Queries | New Butwal Substation Site:<br>Bidder shall provide 4 nos. Barricade Gates and 24x7 Site Security (physical Manpower) for temporary Access for Residential People and Construction works. Please suggest. | The required number of barricade gates and other facilities will be decided during the detailed engineering subject to the approval of Engineer. |

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| 41. | Site Queries | New Butwal Substation Site:<br>MCA - Nepal will provide Space for labour camp within NEA Boundary. Please Confirm. | Bidders are requested to refer to Clause 10.2 Temporary Site Installation under Part 2: Employer's Requirements, Section V – B0 (Project General Description) for better clarifications. |
| 42. | Site Queries | New Butwal Substation Site:<br>Existing Battery and Charger (NEA) is sufficient and Spare feeders are available in existing DCDB for new 2 nos. 220kV AIS bays to be constructed within existing 220kV AIS Substation of NEA.<br><br>Please confirm. | The requirement of the DCDB battery and charger for 220kV AIS bays is also in the current scope of works. |
| 43. | Site Queries | New Butwal Substation Site:<br>Existing AC Power (NEA) is sufficient and Spare feeders are available in existing ACDB for new 2 nos. 220kV AIS bays to be constructed within existing 220kV AIS Substation of NEA.<br><br>Please confirm. | The requirement of the ACDB for 220kV AIS bays is also in the current scope of works. |
| 44. | Site Queries | New Butwal Substation Site:<br>Please provide Existing Cable Trench Drawing to consider the necessary cables. | Cable trench layout will be provided to the Contractor during execution. Bidders are advised to do their own analysis. |
| 45. | Site Queries | New Butwal Substation Site: | Grid Size and Conductor size of Existing Earthman will be provided to the |

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| | | Please provide Grid Size and Conductor size of Existing Earthman within 220kV AIS Substation of NEA. | Contractor during execution. Bidders are advised to do their own analysis. |
| 46. | Site Queries | New Butwal Substation Site:<br>Existing Earthing connection is with Clamps / Nut Bolts.<br><br>Clamps / Nut Bolts for Earthing connection are also applicable for connection of new equipments of 2 nos. New 220kV AIS bays.<br>Please confirm. | Confirmed and the cost of the same is deemed included in the scope of the Contractor. Clamps and bolts connections should not be used for earthing connections underground. |
| 47. | Site Queries | New Butwal Substation Site:<br>Any llumination work (new or upgradation) with in Exisiting 220kV Yard is not scope of work. Please confirm. | Confirmed. However, the Contractor shall be responsible for the restoration of any illumination works that have been hampered during the construction works by the Contractor. |
| 48. | Site Queries | New Butwal Substation Site:<br>Any work related to exisitng Fire fighting system (NEA) is not part of scope. Please confirm. | Confirmed. |
| 49. | Site Queries | New Butwal Substation Site:<br>Bidder has to provide New Firefighting System (Pump house/ water Tank) for 400kV GIS Substation only. Please confirm. | Confirmed. |
| 50. | Site Queries | New Butwal Substation Site:<br>Bidder request to provide details of existing 220kV Bus bar system i.e. Conductor / Alutube Size etc. while interconnetion with NEA existing system. | The information regarding the 220kV Bus Bar System will be provided to the successful bidder/contractor during detailed engineering. Bidders are advised to do their independent analysis for the bidding purpose. |

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| 51. | Site Queries | New Butwal Substation Site:<br>Bidder envisage that cable pits are required for cross the existing Drain and Cable Trench within NEA existing switchyard. MCA will provide necessary approval and shutdown for construction of Cable pit (if required). Please confirm. | Confirmed, if required. |
| 52. | Site Queries | New Butwal Substation Site:<br>During Site visit bidder it was discussed that Substation Automation System will be integrated with NEA existing Substation Automation System.<br><br>1) Please confirm the existing make of NEA - Substation Automation System. Please clarify the scope of integration.<br>2) Bidder can provide separate Remote HMI (Work station) in NEA Control room for monitoring & Control for 400kV GIS. However Main Substation Automation System will be installed for 400kV GIS Substation and located in 400kV Control Room - Please confirm. | 1) The engineer will coordinate with NEA to arrange for the details of existing SAS and will be shared with the Contractor during implementation.<br>2) The same will be determined during the detailed engineering based on the techno economic design proposed by the Contractor and its subsequent approval by the Engineer. |
| 53. | Site Queries | New Butwal Substation Site:<br>During Site visit bidder observed that there is no Control Panel exist for existing NEA 220kV AIS Substation. In SPR rooms only Relay Protection Panels are installed and operated by SCADA System installed in NEA - Control Room. Please confirm. | Confirmed. Bidders are suggested to revisit the site for better clarifications. |
| 54. | Site Queries | New Butwal Substation Site:<br>During Site visit bidder observed that there is no Control Panel exist for existing NEA 220kV AIS Substation. In SPR rooms only Relay Protection | Autotransformer protection panels should be in the 400kV. The contractor will have |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | | Panels (front openable) are installed and Operated by SCADA System installed in NEA - Control Room. Please confirm in similar method only relay panel has to provide for new 2 x 220kV AIS bays. There is no Control Panel is required. Please clarify. | to integrate the two 220kV AIS bays in the 220kV busbar protection. |
| 55. | Site Queries | New Butwal Substation Site:<br>During Site visit bidder observed that there is space for 2 panels in SPR 1 and 4-5 panels in SPR 2 within NEA existing 220kV AIS yard. Please confirm the location of Panel to be installed for 2 new bays of 220kV AIS bays under MCA - 400kV GIS contract. | The same will be determined during the detailed engineering based on the techno economic design proposed by the Contractor and its subsequent approval by the Engineer. |
| 56. | Site Queries | New Butwal Substation Site:<br>Bidder request to amend the price Schedule for Removal of Gravel & PCC of 220kV existing Yard. | MCA-Nepal will review the proposal and will issue an addendum to the bidding document if required. |
| 57. | Site Queries | New Butwal Substation Site:<br>Bidder request to confirm existing Gravel shall be reuse after construction of 2 nos. new 220kV AIS bays. | This aspect will be decided based on the site-specific conditions during the execution stage by the Engineer. |
| 58. | Site Queries | New Butwal Substation Site:<br>Bidder will install & Test and commission the Wave trap & PLCC System (as per bidder proposal) for India Line 1 & Line 2 in Butwal 400kV Substation.<br><br>Bidder is not responsible for any works in Gorakhpur - India PGCIL Substation. Please confirm. | This interface will be coordinated by the Engineer. To ensure compatibility, the Contractor will supply equipment at both ends. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| 59. | Site Queries | New Butwal Substation Site:<br>In Nepal import of any Exothermic material is not possible for Substation construction. Only Government Authorized can procure the same directly.<br><br>Bidder request to Amend the requirement of technical Specification and accept Copper Earthing connection with Clamps and Nut bolts. | Buried earthing grid connection have to be of exothermic type (Cadweld, or equivalent). No clamps and bolts to be used underground. |
| 60. | Site Queries | New Butwal Substation Site:<br>Kindly clarify the type of operating mechanism of circuit breaker i.e. electrically ganged or mechanically ganged operated required. | The operating mechanism of Circuit breaker shall be of both electrically and mechanically ganged type. |
| 61. | For All Lots<br>PSR - Site transportation | There no separate Line item for Vehicle Purchase (1 no. x SUV and 2 nos. x 4WD) in the Price Schedule of any Lot.<br>Hence Bidder understand that the mentioned Type of vehicle shall be on rental basis only during the contract till end of the defect notice period.<br>Please confirm our understanding is correct. | The same is deemed included in the scope of the bidding document. Please note that the purpose of price schedules is to identify the Bid Price which will be used to determine progress payment. The Bidder shall quote the price under the Price Schedule required to carry out the Works stated under Employer's Requirements (including technical specifications) based on the Conditions of Contract. |
| 62. | For All Lots<br>PSR - Site transportation | Kindly clarify driver shall be provided for 8 hours. per working day for each type of Vehicle | Normal working hours will be as per the applicable law. The Contractor shall do their own calculations on how many shifts, if any, they shall work to complete the works on time and its corresponding costs and accordingly include the required hours of drivers for Site Transportation in their Bid. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| 63. | For All Lots<br>PSR - Site transportation | Since there is no separate line item for vehicle running cost, then Bidder request to confirm if vehicle is running more than 2500km/per month then necessary cost adjustment shall be reimbursed to the contractor. | This is a lump sum contract; Bidders are advised to do the necessary analysis considering the complete scope of works and include the price in the Bid Price. Furthermore, please note that the purpose of price schedules is to identify the Bid Price which will be used to determine progress payment. The Bidder shall quote the price under the Price Schedule required to carry out the Work stated under the Employer's Requirements (including technical specifications) based on the Conditions of Contract. |
| 64. | For All Lots<br>PSR - Site transportation | Incase separate line item for vehicle running cost is amended by MCA Nepal in clarification, then Bidder request to confirm if vehicle is running less than 2500km/per month then necessary cost adjustment shall be reimbursed to the contractor. | Please refer response to clarification for S.N. 63. |
| 65. | For All Lots<br>PSR - Site transportation | Incase if Vehicle need to purchase specifically for the contract then please confirm Makes / Model of the each type of Vehicle. | Bidders are requested to refer Annex B01-5-Vehicle Specifications under Part 2: Employer's Requirements Section V – B0 (Project General Description) |
| 66. | For All Lots<br>PSR - Site transportation<br>*The vehicles shall be provided to cover the whole construction* | Bidder shall provide the Driver for car to be procured for the contract. | The vehicles shall be provided to cover the whole construction period including the defects notification period (DNP). |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | *period including the defects notification period.* | In case if Vehicle need to purchase specifically for the contract, kindly clarify after completion of defects notification period, the Vehicle shall be handed over in same condition to MCA - Nepal.<br><br>During handover any Change of consumables e.g. Battery, Tires, Seat Cover, Renewal of Insurance, replacement of Clutch (if applicable), replacement of Shock Absorber (if applicable) and any other consumables required shall be in scope of by MCA - Nepal.<br><br>Please confirm. | The vehicles belong to the contractors and will not be required to be handed over to MCA-Nepal after the completion of DNP. |
| 67. | For All Lots<br>*Transmission line interconnection* | Transmission line conductor and accessories including Disc Insulators, Stringing Hardware etc. from Dead End tower (T/L tower) to Takeoff Gantry (Substation) are not part of Bidder scope of work. Bidder will consider only jumper conductor to connect the Transmission line. Please confirm. | Kindly refer to Clause 4.1.1.1 Works Excluded Part 2: Employer's Requirements, Section V – B0 (Project General Description) for better clarifications. |
| 68. | Site Queries | <u>New Damauli Substation Site:</u><br>As per site visit Bidder understands that the **existing Holy Trees** shall be separated from the new construction using temporary fencing. Bidder requests Owner to provide the specific requirements like<br>1) What type of barricading required and how many sides?<br>2) Height of Barricading<br>3) In what price schedule item this will be paid. | Bidders are requested to refer to Clause 10.2 Temporary Site Installation under Part 2: Employer's Requirements, Section V – B0 (Project General Description) for better clarifications. |
| 69. | Site Queries | <u>New Damauli Substation Site:</u><br>As per site visit Bidder understands that the Approach road is under construction at present. | |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | | Please confirm the approach road shall be available before commencement of work. | NEA has already started the construction of the approach road and is likely to be constructed before the commencement of the present Contract. Furthermore, Bidders are advised to visit to the site and acquaint themselves with the information/ requirement to assure the fulfillment and successful implementation of the scope of works of the Contract. |
| 70. | Site Queries<br>*220kV XPLE Cable and Termination Kit* | New Damauli Substation Site:<br>Bidder request to clarify the scope of inter-connection of Auto Transformer 400kV 1 Ph to 220kV GIS bays to be constructed by other bidder. | This is in the present scope of the Contract. |
| 71. | Site Queries<br>*220kV XPLE Cable and Termination Kit* | New Damauli Substation Site:<br>Bidder request to clarify **Cable Trench or burried cable laying Scope** to be done between Auto Transformer 400kV1, Ph to 220kV GIS bays to be constructed by other bidder. | 220kV cable shall be laid through RCC cable trench. |
| 72. | Site Queries<br>*220kV GIS at NEA Substation in Damauli* | New Damauli Substation Site:<br>Bidder request to confirm 220kV GIS at NEA Substation will available to connect Auto Transformer 400kV1, Ph. | 220kV GIS Substation project is at least 3-4 months ahead than the current project. 220kV GIS Substation Project may continue to lead the construction works and hence their equipment may be available for connection. However, nothing can be confirmed at this stage. |
| 73. | Site Queries<br>*220kV GIS at NEA Substation in Damauli* | New Damauli Substation Site:<br>Incase NEA - 220kV GIS is not available to connect the MCA - 400kV GIS Substation for charging then MCA will provide necessary | The contractor will have to arrange its own power source for commissioning testing. |

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| | | 400kV or 220kV Line to commission MCA GIS Substation. | The substation will be energized when the lines are ready. However, we do sincerely hope 220kV will be available at New Damauli. There will be 132/220kV Transformer and 132kV will be available nearby at Damauli SS. Further as a minimum there is every chance that one Hydro Power plant nearly will be already commissioned by that time and the SS shall be connected with Power House SWYD with 220kV Line. However, nothing can be guaranteed at this time. Even 400kV line under MCA Project may complete. |
| 74. | Site Queries<br>*220kV GIS at NEA Substation in Damauli-Warranty Obligations* | <u>New Damauli Substation Site:</u><br>in case of other make of 220kV GIS and their contractual warranty obligation, MCA will provide necessary approval support to connect Auto Transformer to the NEA - 220 kV GIS. | The autotransformer should be connected to 220 kV GIS, irrespective of contractual obligations of the other contractor. NEA will make the necessary arrangements. |
| 75. | "SPECIFIC PROCUREMENT NOTICE (SPN)<br>The Government of Nepal, acting through the Ministry of Finance (the "Government") and the United States of America, acting through the Millennium Challenge Corporation ("MCC"), entered into a Millennium Challenge Compact on September 14, 2017, providing for a grant of up to Five Hundred Million United States Dollars (US $500,000,000) to advance | We understand that contract shall be awarded by Millennium Challenge Account Nepal (MCA-Nepal) & billing / invoicing shall also be done to the same entity i.e. Millennium Challenge Account Nepal (MCA-Nepal).<br>Please confirm. | The awarded bidder will sign the Contract with the Millennium Challenge Account Nepal (MCA-Nepal). Millennium Challenge Account Nepal (MCA-Nepal) will be the Employer under the Contract and shall be responsible for making payments as per the provisions of the Contract. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | economic growth and reduce poverty in Nepal (the "Compact"), to which the Government will contribute up to One Hundred Thirty Million United States Dollars (US$130,000,000), and intends to apply part of the proceeds toward payments under the contract to be awarded for "Procurement of Plant Design, Supply, Delivery, Installation, Testing and Commissioning of Lot 1: 400kV Ratmate Substation and works at Lapsiphedi and New Hetauda Substations, Lot 2: 400kV New Butwal Substation and Lot 3: 400kV New Damauli Substation".<br>MCC's funding is appropriated by the U.S. Congress and obligated to the compact up-front, with no incremental or partial funding. So, when a contract is signed with an MCA Entity, money is already available to the MCA Entity and, for most contracts, invoices are paid directly to Contractors/Consultants/Suppliers by the US Treasury.<br>The Nepal Compact's "Entry into Force" (EIF) is expected in August 2023 and the Contract resulting | | |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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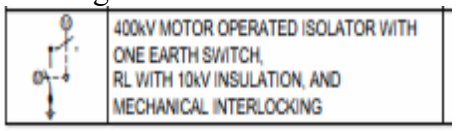
| | from this procurement shall be awarded only after EIF. | | |
| 76. | SPECIFIC PROCUREMENT NOTICE (SPN) and ITB 2.1 Source of Funds | As All the payment would be received from Millennium Challenge Corporation (MCC), USA. Therefore, request you to share the bank account details & also the payment mode & method from where & how payment would be processed by MCC, USA.<br>Please confirm. | All payments will be made by MCA-Nepal. Funding source(s) may be MCC or GoN or both. Payments modes and methods are guided by contract documents. Bank account details are not relevant at this moment. |
| 77. | For All Lots<br>Drawing - 420kV GIS SLD<br>  | The bidder requests to confirm what is denoted by the term "**RL**" in this SLD of GIS at multiple locations. | The RL on the grounding switch is "removable link."<br><br>This removable link provides low voltage test provisions to permit testing at each maintenance grounding switch at voltages up to 10 kV, and up to 200 A. The provisions allow the test voltage and current to be applied to the conductor without removing SF6 gas or other components. All maintenance grounding switches shall be insulated to provide connections to the internal bus for timing and/or resistance measurements. The dielectric withstand capability of this insulation shall be 10 kV rms. The removable ground connection shall be sized for the GIS short-time current withstand rating. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| 78. | For All Lots<br>TECHNICAL SPECIFICATION SECTION 1: 420kV GIS, clause 12.28 12.28. Electric Overhead Travelling Crane | The bidder requests to confirm whether Single girder or Double girder crane required. | Requirement of the girder type will be determined during the detailed engineering based on the techno economic design in line with the requirement of TS to be proposed by Contractor and its subsequent approval by the Engineer. |
| 79. | Price Schedule-Ratmate<br>Base:<br>2.8.1.3 Transformer Protection Panel<br>(Auto Trans Bay 1=1no, Auto Trans Bay 2=1no)<br><br>Option:<br>2.8.1.3 Transformer Protection Panel | In Lot 1 - Ratmate there is mismach in Description of Price Line item No. 2.8.1.3 in Base and Option<br><br>Bidder request to Amend the Price Schedule - Option. | MCA-Nepal will review the proposal and may issue an addendum to the bidding document subject to the approval of authority. |
| 80. | Price Schedule-Ratmate<br>Base:<br>2.8.2.2 Transformer Protection Panel<br>(Auto Trans Bay 1=1no, Auto Trans Bay 2=1no)<br>Option:<br>2.8.2.2 Transformer Protection Panel | In Lot 1 - Ratmate there is mismach in Description of Price Line item No. 2.8.2.2 in Base and Option<br><br>Bidder request to Amend the Price Schedule - Option. | MCA-Nepal will review the proposal and may issue an addendum to the bidding document subject to the approval of the authority. |
| 81. | Not used. | | |
| 82. | Price Schedule-Ratmate<br>Base:<br>3.6.4.1 | In Lot 1 - Ratmate there is minor correction required in Qty. of Price Line item No. 3.6.4.1 in Base and Option | The Qty. of price line item no. No. 3.6.4.1 in Base and Option scope are correct. Bidders are requested to refer to Clause 2, Part 2: Employer's Requirements Section |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | 400kV , Double Bus Bar of 3 single phase (isolated), SF6 gas insulated , metal enclosed 4000A bus bars each enclosed in three individual bus enclosures per diameter - 4 Dia<br><br>Option:<br>3.6.4.1<br>400kV , Double Bus Bar of 3 single phase (isolated), SF6 gas insulated , metal enclosed 4000A bus bars each enclosed in three individual bus enclosures per diameter - 7 Diameter | Bidder request to Amend the Price Schedule. | V – B1 (Project Specific Requirements) for better clarifications. |
| 83. | Price Schedule-Ratmate<br>Base:<br>3.7.4.1<br>220kV, Double 3 single phase (isolated), SF6 gas insulated, metal enclosed 4000A bus bars each enclosed in three individual bus enclosures per diameter - 2 Dia<br><br>Option:<br>3.7.4.1<br>220kV, Double 3 single phase (isolated), SF6 gas insulated , metal enclosed 4000A bus bars each enclosed in three individual bus enclosures per diameter - 7 Diameter | In Lot 1 - Ratmate there is minor correction required in Qty. of Price Line item No. 3.7.4.1 in Base and Option<br><br>Bidder request to Amend the Price Schedule. | The Qty. of price line item no. No. 3.7.4.1 in Base Scope of and Option scope are correct. Bidders are requested to refer to Clause 2, Part 2: Employer's Requirements Section V – B1 (Project Specific Requirements) for better clarifications. |

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| 84. | Price Schedule-Ratmate<br>Base:<br>3.8.1.3<br>Transformer Protection Panel<br>(Auto Trans Bay 1=1no, Auto Trans Bay 2=1no)<br><br>Option:<br>3.8.1.3<br>Transformer Protection Panel | In Lot 1 - Ratmate there is mismatch in Description of Price Line item No. 3.8.1.3 in Base and Option<br><br>Bidder request to Amend the Price Schedule - Option. | MCA-Nepal will review the proposal and may issue an addendum to the bidding document subject to the approval of authority. |
| 85. | Price Schedule-Ratmate<br>Base:<br>3.8.2.1<br>Circuit Breaker Relay Panel<br>(Auto Trans Bay 1=2nos, Auto Trans Bay 2=2nos, Tie CB=2nos)<br><br>Option:<br>3.8.2.1<br>Circuit Breaker Relay Panel | In Lot 1 - Ratmate there is mismatch in Description of Price Line item No. 3.8.2.1 in Base and Option<br><br>Bidder request to Amend the Price Schedule - Option. | MCA-Nepal will review the proposal and may issue an addendum to the bidding document subject to the approval of authority. |
| 86. | Price Schedule-Ratmate<br>Base:<br>3.8.2.2<br>Transformer Protection Panel<br>(Auto Trans Bay 1=1no, Auto Trans Bay 2=1no)<br><br>Option:<br>3.8.2.2<br>Transformer Protection Panel | In Lot 1 - Ratmate there is mismatch in Description of Price Line item No. 3.8.2.2 in Base and Option<br><br>Bidder request to Amend the Price Schedule - Option. | MCA-Nepal will review the proposal and may issue an addendum to the bidding document subject to the approval of authority. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| 87. | Price Schedule-Ratmate<br>Base:<br><br>Option:<br>3.14.4.1Hi-pot tester, 400kV | In Lot 1 - Ratmate there is additional item mentioned in Schedule 3 in Option with "REF" Qty. and unit.<br><br>Bidder request to Amend the Price Schedule - Option. | MCA-Nepal will review the proposal and may issue an addendum subject to the approval of authority. |
| 88. | Price Schedule-Ratmate<br>Base:<br>*Note (SC 4.4.2): Quoted Unit Price shall include all the cost required to perform task successfully such as loading, transportation, insurance, unloading, cutting (if required), placing as per intended required task, while insuring the quality of the material and health and safety, storing at proper storage place with security and carrying out works as per Employer's requirement and Conditions of Contract.*<br><br>Option:<br>*Note (SC 4.4.2): Quoted Unit Price shall include all the cost required to perform task successfully such as loading, transportation, insurance, unloading and storing at proper storage place and carrying out works as per Employer's requirement and Conditions of Contract.* | In Lot 1 - Ratmate there is mismatch in Notation in Schedule 4.4.2 between Base & Option Price Schedule.<br><br>Bidder request to Amend the Price Schedule - Option. | MCA-Nepal will review the proposal and may issue an addendum subject to the approval of authority. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| 89. | Price Schedule-Ratmate<br>Base:<br><br>Option:<br>Note: Quoted Unit Price shall include all the cost required to perform task successfully such as loading, transportation, insurance, unloading, cutting (if required), placing as per intended required task, while insuring the quality of the material and health and safety, storing at proper storage place with security and carrying out works as per Employer's requirement and Conditions of Contract. | "In Lot 1 - Ratmate there is mismatch in Notation in Schedule 4.4.2 between Base & Option Price Schedule.<br><br>Bidder request to Amend the Price Schedule - Option." | MCA-Nepal will review the proposal and may issue an addendum to the bidding document subject to the approval of authority. |
| 90. | Price Schedule-Ratmate<br>Base:<br><br>Option:<br>Note:<br>*Quoted Unit Price shall include all the cost required to perform task successfully such as loading, transportation, insurance, unloading and storing at proper storage place and carrying out works as per Employer's requirement and Conditions of Contract.* | In Lot 1 - Ratmate there is mismatch in Notation in Schedule 4.5 between Base & Option Price Schedule.<br><br>Bidder request to Amend the Price Schedule - Option. | MCA-Nepal will review the proposal and may issue an addendum to the bidding document subject to the approval of authority. |
| 91. | Price Schedule-Ratmate<br>Base: | In Lot 1 - Ratmate there is minor correction required in Notation in Schedule 5 between Base & Option Price Schedule. | MCA-Nepal will review the proposal and may issue an addendum to the bidding |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | The purpose of price schedules is to identify the Bid Price which will be used to determine progress payment and the rates can be used to determine the price of any variation to scope. The Bid Price if accepted and included in the Contract shall become Contract Price and the Contract price shall not be adjusted (except as stated under Conditions of Contract under Sub-Clause 13.8) in case any quantity varies. The Price quoted under Price Schedule is as per provision of Employer's Requirements and Conditions of Contract.<br><br>Option:<br>The purpose of price schedules is to identify the Bid Price which will be used to determine progress payment and the rates can be used to determine the price of any variation to scope . The Bid Price if accepted and included in the Contract shall become Contract Price and the Contract price shall not be adjusted (except as stated under Conditions of Contract under Sub-Clause 13.8) in case any quantity varies. The Price quoted under Price Schedule is as per | Bidder request to Amend the Price Schedule. | document subject to the approval of authority. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | provision of Employer's Requirements and Conditions of Contract. | | |
| 92. | Price Schedule-New Butwal<br>Base:<br>Item No. 2.5.2.1<br>Item No. 2.5.3.1<br>Item No. 2.7.4.9<br><br>Option:<br>Item No. 2.5.2.1<br>Item No. 2.5.3.1<br>Item No. 2.7.4.9 | In Lot 2 - New Butwal, there are minor correction required in Description in mentioned line items between Base & Option Price Schedule.<br><br>Bidder request to Amend the Price Schedule. | MCA-Nepal will review the proposal and may issue an addendum to the bidding document subject to the approval of authority. |
| 93. | Price Schedule-New Butwal<br>Base:<br>Item No. 3.7.1.5<br><br>Option:<br>Item No. 3.7.1.6 | In Lot 2 - New Butwal, there are correction required in Sr. Nos. in mentioned line items between Base & Option Price Schedule.<br><br>Bidder request to Amend the Price Schedule. | MCA-Nepal will review the proposal and may issue an addendum to the bidding document subject to the approval of authority. |
| 94. | Price Schedule-New Butwal<br>Base:<br>3.13.4 HV and MV Power Cables<br>3.13.4.1 Hi-pot tester, 400kV - #REF , #REF<br><br>Option: | In Lot 2 - New Butwal, there are correction required in Line item between Base & Option Price Schedule.<br><br>Bidder request to Amend the Price Schedule. | MCA-Nepal will review the proposal and may issue an addendum to the bidding document subject to the approval of authority. |
| 95. | Price Schedule-New Butwal<br>Base:<br>Stub Bus Differential Protection for Future Bay<br>4.1.8.1.5 Miscellaneous Relay and Control Equipment, not included above. | In Lot 2 - New Butwal, there are correction required in respective Line item between Base & Option Price Schedule.<br><br>Bidder request to Amend the Price Schedule. | MCA-Nepal will review the proposal and may issue an addendum to the bidding document subject to the approval of authority. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | Option:<br>4.1.8.1.5 Stub Bus Differential Protection for Future Bay<br>4.1.8.1.6 Miscellaneous Relay and Control Equipment, not included above. | | |
| 96. | Price Schedule-New Damauli<br>Base:<br>2.7.1.3<br>Transformer Protection Panel<br>(Auto Trans Bay 1=1no, Auto Trans Bay 2=1no)<br><br>Option:<br>2.7.1.3<br>Transformer Protection Panel | In Lot 3 - Damauli there is mismatch in Description of Price Line item No. 2.7.1.3 in Base and Option<br><br>Bidder request to Amend the Price Schedule - Option. | MCA-Nepal will review the proposal and may issue an addendum to the bidding document subject to the approval of authority. |
| 97. | Price Schedule-New Damauli<br>Base:<br>3.13.4 HV and MV Power Cables<br>3.13.4.1 Hi-pot tester, 400kV - #REF , #REF<br><br>Option: | In Lot 3 - Damauli there is additional item mentioned in Schedule 3 in Option with "REF" Qty. and unit.<br><br>Bidder request to Amend the Price Schedule. | MCA-Nepal will review the proposal and may issue an addendum to the bidding document subject to the approval of authority. |
| 98. | Price Schedule-New Damauli<br>Base:<br><br>Option:<br>4.5.2.1.6 Outreach activities on environment, social, health and safety in project areas - N.A N.A Remove it | In Lot 3 - Damauli there is additional item mentioned in Schedule 4.5 in Option<br><br>Bidder request to Amend the Price Schedule. | MCA-Nepal will review the proposal and may issue an addendum to the bidding document subject to the approval of authority. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | 4.5.2.1.7 Capacity building and training for communities such as skill trainings - Lot 1 Remove it. | | |
| 99. | Price Schedule-New Damauli<br>Base:<br>Option:<br>Note:<br>Quoted Unit Price shall include all the cost required to perform task successfully such as loading, transportation, insurance, unloading and storing at proper storage place and carrying out works as per Employer's requirement and Conditions of Contract. | In Lot 3 - Damauli there is additional notation mentioned in Schedule 4.5 in Option Price Schedule<br><br>Bidder request to Amend the Price Schedule. | MCA-Nepal will review the proposal and may issue an addendum to the bidding document subject to the approval of authority. |
| 100. | Price Schedule-Ratmate<br>2.21 Works at New-Hetauda<br>2.21.1<br>Approach cable and hardware for termination of OPGW including joint box of Ratmate – Hetauda D/C Lines at New Hetauda Substation End including necessary AC,DC and Interfacing cable for tele protection application. Addition to the above Telecommunication works should include connection, extension and configuration of the local and network remote fiber optic equipment and all works required for the connection, extension and | Since Hetauda is existing substation, please clarify the scope.<br><br>1) OPGW cable shall be available at Substation Gantry. Bidder has to consider FO Cable and Accessories to connect the OPGW Cable to existing Communication Panel.<br>2) Please Confirm the additional Spare slot is available in communication panel already installed in NEA Hetauda Substation to connect the FO cable.<br>3) There is no Phone/ EPBAX System is required at Hetauda Substation, as it is already available with NEA.<br>4) Necessary Shutdown shall be provided by MCA to interconnect the FO cable for final commissioning. | 1 and 2) Abide to the requirements "network remote fiber optic equipment and all works required for the connection, extension and configuration"<br>3) PABX will be located in Ratmate. Contractor will provide all material and services for interfacing with the existing network<br>4) To be coordinated by the Engineer |

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| | configuration of the phone system as well as for tele protection | | |
| 101. | Price Schedule-Ratmate<br>2.22 Works at Lapsiphedi<br>2.22.1 Supply and installation of necessary approach cable and hardware for termination of OPGW of Ratmate – Lapsiphedi D/C Lines at Lapsiphedi Substation End, it's interfacing with existing DPC for tele protection application and necessary SDH, MUX/DMUX telecommunication terminal equipment required for the communication of the 400 kV Lines and its integrations with SAS at both end substations and SCADA system of the LDC. Addition to above Telecommunication works should include connection, extension and configuration of the local and network remote fiber optic equipment and all works required for the connection, configuration and extension of the phone system as well as for tele protection | Since Lapsiphedi is existing substation of NEA and presently under execution, please clarify the scope.<br><br>1) OPGW cable shall be available at Substation Gantry. Bidder has to consider FO Cable and Accessories to connect the OPGW Cable to existing Communication Panel.<br>2) Please Confirm the additional Spare slot is available in communication panel already installed in NEA Hetauda Substation to connect the FO cable.<br>3) There is no Phone/ EPBAX System is required at Lapsiphedi Substation, as it is already available with NEA.<br>4) Necessary Shutdown shall be provided by MCA to interconnect the FO cable for final commissioning.<br>5) Please confirm the existing make of communication equipment at Lapshiphedi. | Please refer response to clarification for S.N. 100. |
| 102. | New Butwal<br>Shutdown<br>220kV AIS Bays | As per Scope of work 2 nos. 220kV AIS bays to be supplied and installed. During construction period many tools and tackles, machinery will be moving for civil / installation works. | MCA-Nepal will assist the Contractor to conduct the necessary coordination. The Contractor needs to ensure that the safety |

<table>
<tr><th>SN</th><th>Reference to the Bidding Document</th><th>Questions from Bidders</th><th>Response of Millennium Challenge Account Nepal (MCA-Nepal)</th></tr>
<tr><td></td><td></td><td>Please confirm necessary Shut down as and when required shall be provided by MCA - Nepal during construction perion with in Existing yard.</td><td>procedures for working near energized installations are being observed.</td></tr>
<tr><td>103.</td><td>For New Butwal/All Lots<br>Approval & Permission for work</td><td>Bidder shall not be responsible to communicate other authority. MCA will provide necessary permission and approval during construction period. Please confirm.</td><td>MCA-Nepal will assist the Contractor to conduct the necessary coordination as indicated in the Employer’s Responsibility. The Bidder shall communicate with the concerned authorities. The Communication protocol shall be agreed during the Kick-Off meeting</td></tr>
<tr><td>104.</td><td>Price Schedule-Ratmate<br>Schedule 2<br><table><tr><td>2.18.12</td><td>Bus bar Elements (For 400kV)</td></tr><tr><td>2.18.12.1</td><td>Bus conductor elements</td></tr><tr><td>2.18.12.2</td><td>Bus connection elements</td></tr><tr><td>2.18.12.3</td><td>GIS insulators, one of each type used</td></tr><tr><td>2.18.12.4</td><td>Pressure relief elements</td></tr><tr><td>2.18.13</td><td>Bus bar Elements (For 220kV)</td></tr><tr><td>2.18.13.1</td><td>Bus conductor elements</td></tr><tr><td>2.18.13.2</td><td>Bus connection elements</td></tr><tr><td>2.18.13.3</td><td>GIS insulators, one of each type used</td></tr><tr><td>2.18.13.4</td><td>Pressure relief elements</td></tr></table>Schedule 3<br><table><tr><td>3.18.8</td><td>Bus Bar Elements</td></tr><tr><td>3.18.8.1</td><td>Bus conductor elements</td></tr><tr><td>3.18.8.2</td><td>Bus connection elements</td></tr><tr><td>3.18.8.3</td><td>GIS insulators, one of each type use</td></tr><tr><td>3.18.8.4</td><td>Pressure relief elements</td></tr></table></td><td>There are many mismatch between Schedule 2 and 3 w.r.t. sr. no. item description etc. Here we have mentioned the Spare line items of GIS items which are not matching in Schedule 2 & 3.<br><br>Bidder request to clarify and amend the price Schedule.</td><td>MCA-Nepal will review the proposal and may issue an addendum to the bidding document subject to the approval of the authority.</td></tr>
<tr><td>105.</td><td>For All Lots-Base and Option<br>Other necessary works as per Employer's Requirement and Conditions of Contract, if any, not included above (specify).</td><td>Majority of items is Quantified in the Price Schedule except Lot items. BASE and OPTION Prices to be quoted as per Price Schedule.</td><td>a) Bidders are requested to go through the Employer’s requirement to understand the scope of work.</td></tr>
</table>

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| | | For many Line items "Other necessary works as per Employer's Requirement and Conditions of Contract, if any, not included above (specify)" is mentioned at multiple locations in each Price Schedule of BASE and OPTION.<br><br>Bidder request to confirm following:<br>a) Since it is turnkey contract Bidder understand necessary works limited to Substation only is in bidder scope. Please confirm.<br><br>b) Please clarify the expectation & Scope of MCA Nepal from above mentioned highlighted line items to estimate and quote right price.<br><br>c) In Schedule 4.4.2, please confirm item no. 4.4.2.5 without Unit and quantity is not applicable to quote. Since scope is also not clear.<br>d) Above line items is "Not Applicable", "Included" for respective item of each Schedule of BASE & OPTION. Some bidder may quote "Included" and Some bidder may not quote for the same item.<br>This may lead to unclear pricing by each bidder. MCA will also not able to evaluate the price during price evaluation. Please clarify how bidder shall proceed for filling the line items. | b) Bidders are required to go through the Employer's requirement and include price for everything that is required to design and construct the required scope of work as per the Employer's requirement and conditions of Contract. The Employer's expectation is that the Bidder should include the price of the complete scope of work including the cost required to carry out the scope of work. The Bidders are also requested to specify those items, however, even if those items are not specified or listed but required as per Employer's requirement must be included under Bid Price. .MCA-Nepal will review the same and will issue an addendum to the bidding document subject to the approval of the authority.<br><br>c) Same as above. |
| 106. | For all Lots- Base+Option<br>BASE & OPTION - Schedule 5 | Total Sum of Price Schedule 1, Price Schedule 2, Price Schedule 3, Price Schedule 4.1, Price Schedule 4.2, Price Schedule 4.3 and Price Schedule 4.5 is part of Evaluation and Contract shall be awarded for the Total Sum of these Schedule only. Please confirm. | Please refer Section III, *B2. Review of the Prices in the Financial Offer for the evalaution.* |

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| | | | The price quoted under Daywork Schedule shall be considered for evaluation and comparison of prices purpose only, but **shall not form part of the Contract Price.** |
| 107. | For all Lots- Base+Option<br>BASE & OPTION - Schedule 5 | Total Sum of Price Schedule 4.4, Price Schedule 4.4.1, Price Schedule 4.4.2 and Price Schedule 4.4.3 is not part of Evaluation. Bidder shall quote price for only reference purpose only. Please confirm. | The price quoted under Daywork Schedule shall be considered for evaluation and comparison of prices purpose only, but **shall not form part of the Contract Price.** |
| 108. | For all Lots- Base+Option<br>BASE & OPTION - Schedule 4.4.3 | Bidder is responsible to provide necessary equipments, tools and Tackles as and when required during the execution period. In general Local the equipments are hired on rental basis by the contractor. Please note Special Tools and Tackles is imported on returnable basis during execution period. Hence Price for Contractor equipment will be indicative only. Please confirm.<br>For Price Schedule 4.4.3 - Line item 4.4.3.29, Each bidder may quote different equipment or any bidder will not quote any price. Please provide equipment name or delete the item. | MCA-Nepal will review the request further and if required will issue an addendum to the Bidding Document after receiving required approvals. |
| 109. | For all Lots- Base+Option<br>BASE & OPTION - Schedule 4.5 (4.5.4.10) | Bidder request to provide the equipment for which Site training has to be conducted against item no. 4.5.4.10 of Price Schedule. | To be finalized during the execution stage by the Engineer. |
| 110. | For All Lots-PSR<br>3.19.2 TRAINING AT MANUFACTURER'S WORKS | Bidder understand that MCA will bear the cost of travel fares and insurance, lodging, boarding, and any incidentals expenses including Daily Allowances (if any) for the Engineer/Employer representative. Please confirm. | Confirmed. |

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| 111. | For All Lots-PSR<br>3.20.3 WATER/ POWER SUPPLY FOR CONSTRUCTION | Although the Contractor is responsible for the electric power supply required during construction period.<br>Bidder understand that MCA will able to provide electricity on rental basis from NEA for construction works at each site. Necessary arrangement / Energy meters/ DB etc. shall be arranged by the contractor. This will help to minimize the uses of Diesel Generator at the site.<br><br>Please confirm. | Required Construction power is to be arranged by the Contractor. The contractor may make the necessary arrangement with the local distribution center of NEA regarding this. Employer, if needed, may provide administrative support in getting connection from local electricity utility i.e. NEA. |
| 112. | For All Lots-PSR<br>3.20.8.1 SITE FACILITIES FOR CONTRACTOR'S STAFF | Since sufficient Land is available at each site. Bidder request to confirm that the Storage Area and Labour camp shall be available within the site area for each Lot. | The Contractor is suggested to plan adequately for the storage area etc. during the course of execution at the site. However, the Contractor will have the responsibility to acquire or lease the land at his cost for its temporary office, laydown area and storage yards at appropriate locations consistent with its deployment and work performance strategy, and in locations, if required, compliant with the provisions of the ESHSMP and approved by the Engineer and the Employer. |
| 113. | For All Lots-Mandatory Spare Price Schedule<br>&<br>Technical Specification | In Technical Specification of major equipment's, a set of list of Spare mentioned.<br>At the same time list of Mandatory Spare listed in Price Schedule 2. And both are not matching with each other.<br>Bidder request you to confirm Price Schedule 2 is only applicable for Mandatory Spare. | MCA-Nepal will issue an addendum to the biding document subject to the approval of the authority. |

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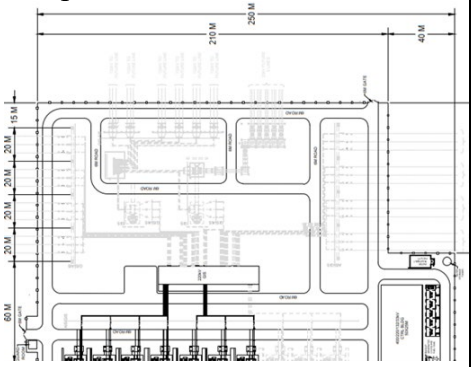
| 114. | For All Lots<br>Qualification<br>Credential of Parent Company for Bidder and Supplier | Refer to Pre bid meeting bidder understand Credential of Parent Company is not valid for evaluation. Please confirm. | Please refer Section III, where it is stated "The Qualifications and Experience of Parents/Sister/Subsidiary Companies shall not be considered for the evaluation of the technical offers." |
| 115. | For All Lots<br>Qualification<br>"SEE NOTE 1" (NOT IN MCC SCOPE) in SLD<br>Sample screen shot attached.<br>  | The equipments e.g. Surge Arrester, SF6 to Air bushing etc. are higlighted under ""SEE NOTE 1"" (NOT IN MCC SCOPE) in each Single Line diagram (SLD) of each lot drawings.<br><br>Please confirm following:<br><br>a) Bidder understand the above indicated items in the SLD is not part of Scope of work of this project.<br><br>b) The quantity of the above mentioned is not covered in the Price Schedule Please confirm. | a) Confirmed.<br>b) Confirmed, however bidder must understand that the purpose of price schedules is to identify the Bid Price which will be used to determine progress payment. The Bidder shall quote the price under the Price Schedule required to carry out the Works stated under the Employer's Requirements based on the Conditions of Contract. |

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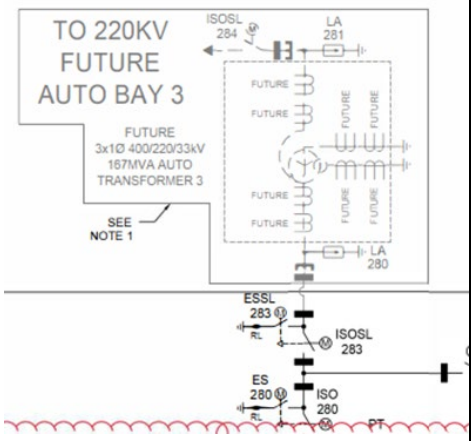
| |  | | |

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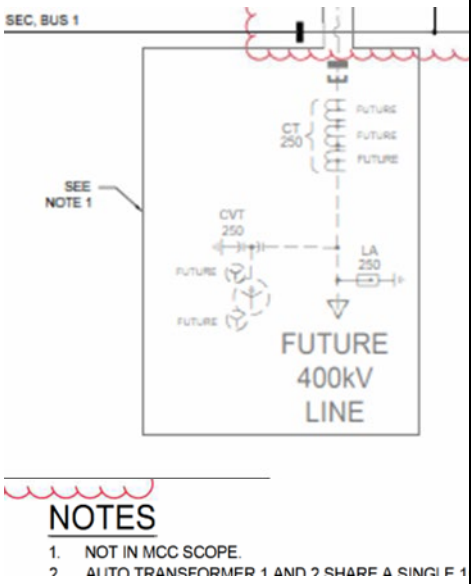
| 116. | For All Lots-Notation in the Drawings<br>"SEE NOTE 1" (NOT IN MCC SCOPE) in SLD<br>Sample screen shot attached.<br>  | The equipments e.g. Surge Arrester, SF6 to Air bushing, CT CVT etc. are higlighted under ""SEE NOTE 1"" (NOT IN MCC SCOPE) in each Single Line diagram (SLD) of each lot drawings.<br><br>Please confirm following:<br><br>a) Bidder will not consider any item which are mentioned as "SEE NOTE 1" (NOT IN MCC SCOPE) in BASE or Option proposal<br><br>b) Bidder will not consider any equipments as indicated but "Faded" or as mention "Future" in SLD and Layout. Please confirm. | a) Confirmed.<br>b) Confirmed. The Bidder shall quote the price under the Price Schedule required to carry out the Works stated under the Employer's Requirements based on the Conditions of Contract. |
| 117. | For all Lots<br>Section III, Sub-Factor 15 "Similar Design Experience" | The Bidder understands that the project including design scope of substation contract would meet the requirement as stated. Please confirm. | MCA-Nepal has already issued an addendum. Bidders are requested to refer to Addendum-2 with respect to Similar Design Experience requirements.<br>Please note that all the three requirements mentioned under "15. Similar Design Experience" require the Contractor to demonstrate design experience and if the Bidder has design experience in substation |

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| | | | contracts as per the requirements of 15. Similar Design Experience, then the submitted experience will meet or exceed the requirements depending on the submission. |
| 118. | For all Lots<br>Section III, Sub-Factor 16 "Similar Construction Experience" | The Bidder understands that all requirements indicated in clause (a), (b), (c), & (d) can be met with same or different projects. Please confirm. | Same experience may satisfy the requirements of 16 (a), 16(b), 16 (c) and 16 (d), if the projects submitted as experience has all the components of the requirement of 16 (a), 16( b), 16 (c) and 16 (d).<br><br>The requirements can also be satisfied with different projects.<br>The bidders are requested to submit experience certificates for 16 (a), 16(b), 16 (c) and 16 (d) separately for ease of evaluation. |
| 119. | For all Lots<br>Key Personnel<br>*Page: 87-88* | The Bidder understands that the key personnel requirements can be met by the qualified candidates (as per the requirement) outside the organization who are willing to provide their services on project specific agreements. | Confirmed, however the persons should confirm in writing that he/she will be available for this assignment. |
| 120. | For all Lots<br>Section I, Clause 5.8 (d) "Conflicts of Interest"<br>*(d) Participate in more than one Bid in this process; participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the party is involved; however, this provision* | The Bidder understands that a bidder participating directly in the capacity of bidder and if supporting other bidders in the capacity of supplier that will be considered as conflict of interest. Please confirm. | Please refer Letter of Technical Offer point 7, which states “We are not participating, as a Bidder or as a subcontractor, in more than one Bid in this bidding process in accordance with ITB Sub-Clause 5.8 (d).” Thus, Bidder participating directly in capacity of Bidder can support other |

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| | *does not limit the inclusion of the same subcontractor in more than one Bid.* | | bidders as Supplier but cannot be subcontractor of another Bidder. |
| 121. | For all Lots<br>Documents Comprising the Bid, ITB clause 12.2 | When the bidder is participating in more than 1 lot, can bidder give common documents for qualification and lot specific towards lot specific technical response. Please confirm. | Yes. Please refer to clarification 2, which provides further detail. |
| 122. | For All Lots<br>Section III, Qualification and Evaluation Criteria | With the highest qualifying requirement under any lot - Will it be considered for other two lots as well as a common qualifying documents? Please confirm. | The Bidder needs to satisfy the requirement individually. For example for "16. Similar Construction Experience" the requirement is stated as "Successfully completed turnkey or design-build substations projects within the last ten 10 years for each lot, of below mentioned value:<br>for Lot 1: US$34 Million (2 Contracts each of US$ 34 Million or above)<br>for Lot 2: US$ 20 Million (2 Contracts each of US$ 20 Million or above)<br>for Lot 3: US$ 21 Million (2 Contracts each of US$ 21 Million or above)<br><br>If a bidder wants to satisfy this requirement for all three lots, in that case the bidder should have 2 required project experience of value US$34 million or above, plus 2 required project experience of value US$21 million or above and 2 required project experience of value US$20 million |

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| | | | or above. In total 6 relevant projects experience of the required value. |
| 123. | For All Lots<br>Section III, Sub-Factor 13 "General Design Experience"<br>*Requirements: Experience under contracts in the role of designer for at least the last ten (10) years prior to the Bid submission deadline, and with activity in at least nine (9) months in each year.* | The Bidder understands that design experience under any discipline shall be acceptable for this requirement. The requirement is not limited to substation design. Please confirm. | For General Design Experience, design experience in any discipline will be acceptable. |
| 124. | For All Lots<br>Section III, Sub-Factor 14 "General Construction Experience"<br>*Requirement: Experience under contracts in the role of contractor, subcontractor, or management contractor for at least the last ten (10) years prior to the Bid submission deadline, and with activity in at least nine (9) months in each year.* | The Bidder understands that the construction experience under any civil and electrical discipline shall be acceptable for this requirement. The requirement is not limited to substation construction experience. Please confirm. | For General Construction experience, any experience in civil or electrical construction experience will be acceptable. |
| 125. | For All Lots<br>Section III, Sub-Factor 15 "Similar Design Experience" | The Bidder understands that the Similar design experience requirement is common for all the lots. Bidders participating in all of the three lots are required to demonstrate only 2 projects meeting the requirement. Please confirm. | Confirmed. However, 2 projects requirement is for 15(a) and 15(b) for 15 (c) the requirement is of only one project. Further, bidders are suggested to refer addendum #2 for change in the requirement. |
| 126. | For all Lots<br>Section III, Sub-Factor 16 "Similar Construction Experience" | The Bidder understands that only one project outside the bidder's country shall be acceptable for all 3 lots. Please confirm | Your understanding is not correct. However, MCA-Nepal has already issued |

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| | | | an addendum. Please refer to addendum #2 for changes in the requirement. |
| 127. | For All Lots<br>Section III, Sub-Factor 17 "Environmental and Social Management Experience" | The Bidder understands that only two projects indicating ESMP shall be commonly acceptable for all the three lots. Please confirm. | Only two projects satisfying the requirements in which the Bidder has developed and implemented at least two Environmental and Social Management Plans (ESMP) that include gender and social inclusion considerations for similar types of projects in the last five years prior to the Bid submission deadline, will satisfy the requirement for all three lots.<br><br>Also, please refer to the requirement stated under EXP-5 for submission of documents and information with your bid. |
| 128. | For All Lots<br>Section III, Sub-Factor 17 "Environmental and Social Management Experience" | Please Confirm:<br>1. Please confirm that a similar type of projects includes experience in transmission projects with the similar client is acceptable.<br>2. Please confirm the acceptance of ESMP enabled substantially completed projects for the requirement as stated. | 1. Confirmed.<br><br>2. The Bidder must have developed and implemented at least two Environmental and Social Management Plans (ESMP) that include gender and social inclusion considerations for similar types of projects in the last five years prior to the Bid submission deadline. fThe Bidder must include evidence of development and implementation of |

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| | | | two ESMP as per the requirements in their Bid submission. |
| 129. | For All Lots<br>Section III, Sub-Factor 18 "Health and Safety Management Experience" | The Bidder understands that only two projects, indicating HSMP shall be acceptable for all of the three lots. Please confirm. | Only two projects satisfying the requirements in which the Bidder has developed at least two Health and Safety Management Plans for similar types of projects in the last five (5) years prior to the Bid submission deadline, will satisfy the requirement for all three lots.<br><br>Also, please refer to the requirement stated under EXP-6 for submission of documents and information with your bid.<br>Bidder must include evidence of development and implementation of two Health and Safety Management Plans as per the requirements in their Bid submission. |
| 130. | For All Lots<br>Section III, Clause D "Technical Evaluation Criteria for each Lot"<br>*It is indicated in the heading that "Technical Evaluation Criteria for each Lot". However, Note no 1 says, "For each lot, the Bidder needs to include separate information for Criteria 2 and Criteria 3. To qualify for each lot, the Bidder's proposal for each lot* | The Bidder understands that Information to be provided for Criteria 1 may be common for each lot for scoring, if the bidder participates in all of the three lots. Please confirm. | Confirmed. For Criteria 1, the information to be provided may be common for all the three lots.<br><br>Please note that under Section III, D. Technical Evaluation Criteria for each Lot, there will be only one evaluation for Organizational Capability and Experience of the Contractor within last 10 Years; and bidder submitting the bid for Lot 1, Lot 2 and Lot 3 will be getting same marks for |

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| | *needs to score minimum technical score of 70."* | | Lot 1, Lot 2 and Lot 3. However, the bidder who has experience more than the requirement will get a higher score as per A6. Technical Evaluation Framework. |
| 131. | For All Lot<br>Section III, Qualification and Evaluation Criteria / B2. Review of the Prices in the Financial Offer | The Bidder understands for evaluation purpose, Base + Optional price will be considered. In case of Base price is higher for one of the bidders but lowest on over all basis. will MCA award the contract on base price? | Please refer to Addendum#2 of the Bidding Document. The evaluation of Bids shall be based on total cost of Option scope of work.<br><br>MCA-Nepal/Employer is intending to further amend this requirement after receiving approval from the authority. |
| 132. | For All Lot<br>Section III, Clause D "Technical Evaluation Criteria for each Lot"<br>*For Resident LDC (Load Dispatch Centre) Integration and SCADA specialist* | Please note that the integration requirement of LDC is generally provided by the CRP SAS suppliers along with the integration channel partner of existing make of LDC. The substation contractor generally does not have the specific resources for such a requirement. The Bidder request us to remove the same from the criteria. | The criteria in the bid document will not be amended. |
| 133. | For all Lot<br>Section III, Clause D "Technical Evaluation Criteria for each Lot", Criteria 3 - "Key Professional Personnel Qualifications"<br>*Gender and Social Inclusion Manager - "Minimum 5 years of working experience in Gender and Social Inclusion with at least Bachelor's degree in social science / human geography (or equivalent)* | Please note that the Gender Inclusion in Substation projects in Nepal is not in regular practice. Hence it will not be possible to propose the experts having Gender inclusion experience of 10 years in Substation projects and knowing Nepali. However, GESI is already in practice for various other infrastructure projects (like Roads & Hydro etc.).<br><br>For environment and Social Safeguards candidates, there is a possibility to have personals | The requirement doesn't mention experience of 10 years in Substations. The criteria in the bid document will not be changed. |

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| | *and working knowledge in Nepali, Hindi and English.* | having relevant rich experience in other Infrastructure projects in Nepal.<br><br>The Bidder requests us to accept the candidates for GESI, Environment and Social Safeguards having similar experience in Infrastructure projects other than Substation projects. | |
| 134. | For All Lot<br>Form ELI-2: Joint Venture/Association/Subcontractor/Key Suppliers/Other Key Vendors Information Sheet | 1. Please confirm whether ELI-2 has to be submitted by all the Suppliers and Vendors.<br>2. Please confirm whether the attachment to ELI-2 form:<br>- Article of Incorporation<br>- Authorization to represent the firm<br>- ELI-3<br><br>has to be submitted by all the Suppliers and Vendors. | 1. Confirmed<br>2. ELI-2 is for Joint Venture/Association/Subcontractor/Key Suppliers/Other Key Vendors Information and attachments as per ELI-2 are:<br>Attached are copies of the following original documents.<br>1. Articles of incorporation or constitution of the legal entity named above, in accordance with ITB Clause 5.<br>2. Authorization to represent the firm named above, in accordance with ITB Sub-Clauses 21.5 and 21.6.<br>3. Government-Owned Enterprise Certification Form [ELI-3]. Article of Incorporation is also for Bidder (in case of Joint Venture, for all partner of Joint Venture)<br>Authorization is for Bidder (in case of Joint Venture, for all partner of Joint |

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| | | | Venture), and authorization should be in accordance with ITB 21.5. |
| 135. | For All Lot<br>Form FIN-4: Current Contract Commitments / Works in Progress | Please confirm whether the Current Contract Commitments / Works in Progress has to be given for all the Businesses of the Firm/ Company or only related to Substation works. | The current contract commitments/works in progress for all business of the firm/s submitting the bid, shall be submitted. |
| 136. | For All Lot<br>In accordance with the provisions of GC14 (Contract Price and Payment), the Employer shall pay the Contractor in the following manner ….....<br>*Section IV: Bid Submission Form (Schedule of Payments)* | As per the schedule of payment, only Plant and Material first two payments are indicated to paid through irrevocable letter of credit. However, it is not mentioned for balance payment of Plant and Material & any other payments related to Design, Installation, startup, commissioning, and testing Services shall be paid directly to bidder's bank account, in bidder's home country. Please confirm. | All the payments' modes and methods will be as per the terms specified in contract. Payments will be made in the bank account specified in the contract. |
| 137. | For All Lots<br>Page 162 of Volume 1 - Section IV Bid Submission Form<br>Please note that Ten (10) percent of the measured value of installation, startup, testing and commissioning a service performed by the Contractor shall be retained from each payment certificate | Please confirm the retained from each payment is applicable on Schedule 4 items or not on all the items under the contract. | Retention will apply to all items under the Contract as per Conditions of Contract Sub-Clause14.3(c). |
| 138. | For All Lot<br>Page 162 of Volume 1 - Section IV Bid Submission Form | Please confirm the time duration for making the payment after submission of the bills along with all documents. | Please refer to GCC and PCC Clause 14 of the Conditions of Contract. For Interim Payments please refer Sub-Clause14.6 and 14.7 and for final payment refer 14.13. |
| 139. | For All Lot<br>Section I, "Instructions to Bidders" Clause 38.5 & | Please confirm if all the supplies are exempted from any taxes, duties, entry tax and import duty/tax for this contract. | Please refer to Compact Section 2.8 which shall be read along with Annex VII – Tax Schedules which provide the conditions for |

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| | "Bid Data Sheet" Clause 15.6 (a) | | tax exemption, refund or reimbursement of Taxes. The bidder needs to assess the application of taxes on its own depending on its status of incorporation and prior registration in Nepal and under the laws of Nepal. |
| 140. | Section IV, "Schedule of Payments" Note 5 &<br>"Bid Submission Forms", Application for Interim Payment Certificates Clause 14.3 (c) | The Bidder understands that the deduction from each payment certificate is applicable only on installation, startup, testing and commissioning. No deduction shall be applicable on the payment certificates of Design & Supply. Please confirm. | Your understanding is not correct. Deduction is applicable for all schedules. Payment will be as per schedule and for each payment there will be deduction as per Conditions of Contract Sub-Clause 14.3 (c). |
| 141. | Section IV, "Schedule of Payments"<br><br>General | The Bidder understands that compact period has expiry of 5 years from the entry into force. The project completion period is 3-4 years, in the event of delay in completion of project due to any reasons.<br><br>Whether the retention payment for completed works be made from the compact fund. | The funding source may be GoN or MCC or both. Funding from both MCC and GoN will be based on the requirements of MCA-Nepal and budgeting procedure of fund sources including retention payment. |
| 142. | Substation Commissioning | The project involves multiple contracts under the complete scheme. Please confirm whether the retention payment be paid on physical completion of respective substation in each lot, even if there charging at rated or lower voltage cannot be done due to readiness of incoming line. Please confirm. | Each Lot will be treated as a separate contract even if we will sign a contract for more than one lot with one successful Bidder.<br><br>Please refer GCC Sub-Clause 14.9 with PCC. GCC clearly states "When the Taking-Over Certificate has been issued for the Works, and the Works have passed all specified tests (including the Tests after |

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| | | | Completion, if any) the first half of the Retention Money shall be certified by the Engineer for payment to the Contractor." |
| 143. | Ratmate Substation, General | During Site Visit, it is observed that at Ratmate Substation, huge land is available however the land requirement of substation is limited. It is also observed that the entire plot is having a significant level difference.<br>We request you to freeze the substation boundary, transmission line termination points and FGL within defined time schedule, allowing sufficient time for bidder to estimate accurately. It will also help to make all the bidders comparable. | Foot prints already shared in the data given in the pre-bid minutes of the meeting. The kmz file however, will be shared separately as an addendum to the Bidding Document after receiving approval from the authority. |
| 144. | Part 2<br>220913_Lot1_RAT_TS,<br>220913_Lot2_NBW_TS,<br>220913_Lot3_NDM_TS<br>CHAPTER 3: AUTO-TRANSFORMER, Cl. 3.1 a.iv<br>*3.1 Tank and Tank Accessories*<br>*a. Tank*<br>*iv. The auto transformers shall be of the bell type tank with a joint at about 500 mm above the bottom of the tank. If the joint is welded it shall be provided with flanges suitable for repeated welding. The joint shall be provided with a suitable gasket to prevent weld splatter inside the tank. Proper tank shielding shall be installed to prevent excessive* | The Bidder propose to offer this transformer with conventional type of tank with bolted top cover due to the following reasons:<br>a) Any inspection at site can be easily carried out by removing top cover and inspection covers.<br>b) If we supply with bell tank design, the gasket joint which is at tank bottom side will continuously see excessive oil pressure head and there will be more chances of oil leakage. Due to this reason many customers prefer conventional tanks even for higher ratings.<br>c) We have supplied upto 500MVA 400kV with conventional tank with bolted top cover to various utilities in India.<br>In view of the above we request you to kindly accept the tank with conventional, bolted top cover construction. | This is the specific requirement of the bid, bidders are requested to adhere to the requirements of the bid. |

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| | *temperature rise of the joint.* | | |
| 145. | Part 2<br>220913_Lot1_RAT_TS,<br>220913_Lot2_NBW_TS,<br>220913_Lot3_NDM_TS<br>CHAPTER 3: AUTO-TRANSFORMER, Cl. 3.3 f<br>*3.3 Wind*<br>*f. The winding resistance shall not vary from phase to phase by more than 1%.* | Winding resistance variance between phases depend on various factor like tolerance on conductor dimension effecting area, tolerance on proof stress effecting conductivity, and cable length for vector connection and surface contact at lug/various connections. So, variation of 1% is not possible. It will be as per measurement at actuals without effecting principal guaranteed parameters like losses. | The provision will not change. The winding resistance shall not vary from phase to phase by more than 1%. |
| 146. | Part 2<br>220913_Lot1_RAT_TS,<br>220913_Lot2_NBW_TS,<br>220913_Lot3_NDM_TS<br>CHAPTER 3: AUTO-TRANSFORMER, Cl. 3.5 a xii & xiii | Please clarify requirements of tertiary compartment and confirm requirement of air filled cable box on tertiary. | Tertiary air-filled cable box is a typical solution but there must be interphase barriers to prevent interphase short-circuit. |
| 147. | Part 2<br>220913_Lot1_RAT_TS,<br>220913_Lot2_NBW_TS,<br>220913_Lot3_NDM_TS<br>CHAPTER 3: AUTO-TRANSFORMER, Cl. 3.5 b<br>*b.The transformer terminals shall be designed to connect to GIS to air bushings using open air flexible conductors and standard terminal pads.* | The Bidder understands that, Bushing (HV,MV,TV, Neutral) terminations is through oil-to-air bushings. Please clarify | Your understanding is correct |

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| 148. | Part 2<br>220913_Lot1_RAT_TS,<br>220913_Lot2_NBW_TS,<br>220913_Lot3_NDM_TS<br>CHAPTER 3: AUTO-TRANSFORMER,<br>Cl. 3.3 b & Cl. 3.8 ii<br>*Cl. 3.3 b. .....All windings shall be furnished with insulation that will permit continuous operation at a winding rise of 55°C above ambient and a hotspot rise of 90°C above ambient without affecting the normal life expectancy of insulation.*<br><br>*Cl. 3.8 ii. Winding temperature rise by resistance shall not exceed 65° C and hottest spot winding temperature rise shall not exceed 80° C for the full range of transformer operation.* | Both clauses are contradictory. Please confirm temperature rise requirement of avg. winding, top oil and hot-spot winding rise. | MCA-Nepal may issue an addendum to correct the ambiguity in the Bidding Document after receiving approval from the authority as follows:<br>Winding temperature rise by resistance shall not exceed 55° C and hottest spot winding temperature rise shall not exceed 90° C for the full range of transformer operation. |
| 149. | Part 2<br>220913_Lot1_RAT_TS,<br>220913_Lot2_NBW_TS,<br>220913_Lot3_NDM_TS<br>CHAPTER 3: AUTO-TRANSFORMER, Cl. 5.2 note C. i<br>*Bushing (Type Test per IEC 60137, including snap back/seismic test)* | The Bidder understands that, this is requirement for 400kV and above OIP bushings only. Please confirm | MCA-Nepal may issue an addendum after approval from the authority with the following: Bushing (Type Test as per IEC:60137 including Snap back & Seismic test for 400 kV and above voltage class bushing) |

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| 150. | Part 1<br>Auto Transformer Technical Data Sheet Sl.No.17.2<br>*17.2 - Tap changer shall be located on the HV side of the series winding for achieving ± 10% using 17 (8 plus, 8 minus, nominal) steps of 1.25%. It shall be of constant flux voltage variation type as per CI.3.2 of IS:2026 Part- IV-1977* | The Bidder understands that, tap changer is required for HV variation and is located at common end of series winding to achieve constant ohmic impedance requirement. Please confirm. | On Load Tap changer shall be provided for variation of voltage on HV side of +- 10% using 17(8 plus, 8 minus, nominal) steps of 1.25% each, provided on common end of series winding. It shall be of constant flux voltage variation type as per CI.3.2 of IS:2026 Part- IV-1977 |
| 151. | Part 1 and 2<br>220913_Lot1_RAT_TS,<br>220913_Lot2_NBW_TS,<br>220913_Lot3_NDM_TS<br>CHAPTER 3: AUTO-TRANSFORMER, 3.14. DISSOLVED GAS AND MOISTURE MONITOR table 6<br>&<br>Auto Transformer Technical Data Sheet Sl.No.25<br><br>*Table 6 : 8 gasses + H20*<br><br>*25. Online dissolved gas and moisture monitoring device (DGA Monitoring): GE-HYDRAN M2 or equivalent* | Both clauses are contradictory. As per Technical specification 8gas + moisture online DGA is required and as per technical data sheet 4 gas GE-HYDRAN M2 or equivalent model is required. Please confirm which one to follow. | Kindly adhere to the requirement stated in Clause 3.14 of Chapter 3 Auto Transformer of Technical Specification (TS) volume. The ambiguity in the bidding document in the Technical Data Sheet will be corrected through issuing an Addendum to the Bidding Document, after receiving approval from authority. |

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| 152. | Employer's Requirements<br>Section V – B0 (General Technical Requirement) Cl. 10<br>*TYPE TESTING, INSPECTION, TESTING & INSPECTION CERTIFICATE* | For Power/ Auto Transformers, please confirm if type tests reports of similar or higher rating transformer are acceptable. | The type test reports of similar or higher rating transformer are acceptable. Similarity should be similar to the conditions as defined in IEC 60076. Furthermore, the first unit manufactured should be type tested unless there is an identical unit that has been manufactured in the past. Any previous type tests report is subject to Engineer's approval to be submitted at contract commencement and that repetition of type tests will be at no charge to the Employer. |
| 153. | Part 2<br>Short Circuit (S.C) withstand General | Bidder do not envisage any S.C test for the transformer. Also, bidder do not envisage any SC similarity as per IEC 60076 Part -5. The Bidder understands that Short Circuit withstand calculations will be acceptable in the event of order to demonstrate Short Circuit withstand capability of the transformer. Please confirm | Kindly adhere to the requirement of the Bidding Documents. |
| 154. | 'Section IV. Bid Submission Forms, Price Variation | Price adjustment formula specified for Auto/ Power Transformers has 40% is fixed component and 60% is variable. This 60% variation is covers variation of only Copper and CRGO. This won't cover manufacturer's full exposure towards commodity price variation. Other components like Mild Steel (MS), Oil, Insulation and Labor also plays major role in transformer composition. In last two years, price of raw materials and international transportation has increased significantly and still their behavior is highly volatile. Hence, the bidder request us to consider | The Bidding Document will not be amended on this respect. |

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| | | price variation of these commodities as well and reduce fixed component to reasonable value. Also, bidder recommend to follow IEEMA price variation formula for this. | |
| 155. | Part 2<br>B1.2 , Chapter 19 : Air conditioning specification, Clause no.2.a.iii<br>*Air Conditioning System of Control Building* | Bidder is considering High wall type split AC units of 2TR for Control room Building. Please confirm. | The bidders are requested to do an independent analysis of the same considering the technical requirements. |
| 156. | Part 2<br>B1.2 , Chapter 19 : Air conditioning specification, Clause no.1.e<br><br>*Non CFC refrigerants shall be utilized for the Air conditioning system* | Bidder is considering HFC Refrigerant R-32 which has lower environmental impact having With a GWP (global warming potential ) of 675 and an ODP (Ozone depletion potential ) of 0. Please confirm. | Bidders are required to propose addressing the functionality of the equipment meeting the technical specifications. |
| 157. | Part 2<br>B1.2 , Chapter 19 : Air conditioning specification, Clause no. 3 . d. ii<br>*Main and standby units shall be changed over periodically which shall be finalised during detailed engineering* | Bidder is considering Standby High wall type split AC units in Control Room & Battery Room only. Please confirm. | Kindly adhere to the requirement of the bidding document. |
| 158. | Part 2<br>B1.2 , Chapter 9 : Civil Works Specification, Section 2, Clause no 11.b<br>*Battery Room must be mechanically ventilated and shall be designed to maintain hydrogen* | Bidder is considering propeller type exhaust fan for Battery room ventilation. Please confirm | Kindly adhere to the requirement of the bidding document. . |

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| | *concentration in the room below 1% and have a continuous ventilation at a rate of not less than 1cfm/ft2 of floor area of the room.* | | |
| 159. | Part 2<br>B1.2 , Chapter 19 : Air conditioning specification<br>General | Air- Conditioning heat load calculation shall be done on the basis of max site temperature and unit will satisfactory work up to ambient temperature i.e. 50 deg C. Please confirm. | The Contractor is required to furnish and justify the calculations for the design of the air conditioning system which shall be finalized during detailed engineering subject to the approval of Engineer. |
| 160. | Part 2<br>B1.2 , Chapter 5 : Fire Protection System Specification, Clasue no. 1.1-f<br>*f. The equipment offered shall comply with the relevant latest International Standards unless specified otherwise. All fire protection equipment and components shall have the approval of at least one of the following agencies:*<br>*i. UL of USA.*<br>*ii. FM of USA*<br>*iii. LPCB of UK*<br>*iv. VDS of Germany,* | Although all fire protection equipment and components may not be UL/FM/LPCB/VDS Approved, So, based on availability of approved/listed items of Fire Protection System, bidder is considering following fire protection equipment and components as UL/FM/LPCB/VDS approved:<br>1. Fire Pumps<br>2. Hydrant Valve<br>3. Deluge Valves, Nozzles, QB Detectors<br>4. Fire Detection and Alarm System<br>5. Clean Agent System | All the fire protection equipment shall comply with the requirements in the technical specifications. |
| 161. | Part 2 | As current NEA network is of STM-04 capacity. So connectivity with new node of STM-16 is not | To be coordinated by the Engineer at the Contract design stage to ensure |

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| | B1.2. Chapter 12: Telecommunications Specification<br>2.1. c General Network Characteristics<br><br>2.2. b Transmission Equipment<br>*New Generation SDH STM-16 (Upgradeable to STM-64) Add/Drop Multiplexers (ADM)/ Equipment shall be provided ….*<br><br>*SDH node will be STM-16 with five (5) MSP protected directions…* | compatible. As per NEA standard specification they are migrating to MPLS system. According to NEA technical specifications "Communication equipments calls for SDH features with STM – 4 MADM upto 4 MSP Protected directions as well as MPLS – TP functionality with 10G capacity 4 MSP Protected directions along suitable optical line interfaces & tributary cards."Please confirm that this is acceptable and applicable for this project. | compatibility with NEA network equipment. |
| 162. | Part 2<br>B1.2. Chapter 12: Telecommunications Specification<br>2.1.General Network Characteristics<br>*f. The SDH node will be interoperable with existing SDH equipment at other substations, LDC, and remote sites to maintain the integrity of the existing FO communication backbone.* | Please confirm the availability of spare optical port at remote NEA substations for connectivity of new node. | Bidders are requested to do an independent analysis to suffice to the technical specifications and fulfill the scope of works as stated in the bidding document. |
| 163. | Part 2<br>B1.2. Chapter 12: Telecommunications Specification (Page 7/52)<br>2.1.General Network Characteristics<br>*h. In case other interfaces, such as asynchronous sub-channel data cards* | Nowadays all applications run on IEC-104 protocol and PDH add drop multiplexer (IEC-101) and low speed data cards are now obsolete and NEA is also not buying it anymore.<br><br>Please confirm that this is not required. | Kindly adhere to the requirements of the bidding document. |

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| | *(RS232/V.24/V.28), synchronous data cards (V.35/X.21), 2-wire voice channel card or 4-wire (E&M) voice channel cards are required, they will be supplied either in the same shelf or as independent SDH equipment.*<br><br>*j. Provide, install, test and commission Multiplexer (Drop/Insert Operation). The Data/Voice Multiplexer equipment design shall be provided with 2 x 2.048Mbit/s aggregate ports, redundant power supply cards and redundant cross connect matrix cards (and/or E1 cards). Analog Voice and Data Interface cards shall be provided.* | | |
| 164. | Part 2<br>B1.2. Chapter 13: Telephone System Specification<br><br>2. Equipment Technical Particularities<br>*b. The EPABX will only be installed at the Ratmate Substation among the substations to be built by MCA-Nepal while New Damauli and New Butwal will be connected through remote extensions via the SDH links.* | Please confirm E1 card availability at existing NEA s/s with make and model of EPABX. | Interface to be coordinated by the Engineer at the execution stage. |

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| | *And*<br><br>*k. The EPABX at Ratmate should be linked (Via SDH fiber optic network) with the other EPABX (installed in other NEA substation) by means of digital trunks (such as E1(2048 kb/s) of 30 voice channels)* | | |
| 165. | Page 2<br>B1.2. Chapter 13: Telephone System Specification<br><br>2.5.2. Analogue Subscriber Phone<br>*The Contractor shall supply analog subscriber phone sets at the substations equipped with limited features such as waiting key and automatic emergency dialing. It shall have a DTMF keypad.* | Please confirm that analog phones are not required and IP phones have to be supplied. | Contractor to abide to the requirements and supply analogue phone as well as IP phones |
| 166. | For Lot-1<br>Part 2: Employer's Requirements<br>B1.2 , Chapter 19 : Air conditioning specification, Clause no. 1.b<br>*Contractor shall provide all necessary design, engineering, drawing and construction of all VAC systems at the sub-station.* | The Bidder understands that AHU type ventilation system to be considered for 400KV & 200KV GIS Hall with 2 Air changes/hr. Please confirm | Bidders are requested to do an independent analysis to suffice to the technical specifications and fulfill the scope of works as stated in the bidding document. The type of ventilation will be confirmed during detailed engineering subject to the approval of Engineer. |
| 167. | For Lot-1<br>General | The Bidder assumes that Ventilation through propeller type Exhaust fan for following rooms only:<br>1. ACDB/DCDB Room | The requirement shall be finalized during detailed engineering subject to the approval of Engineer. |

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| | | 2. Kitchen/Pantry<br>3. Toilets | |
| 168. | For Lot-1<br>Part 2: Employer's Requirements<br><br>B1.2 , Chapter 19 : Air conditioning specification | The Bidder understands that, Heating system is not envisaged for this tender as per Chapter 19-Technical Specification of Air Conditioning System. Please confirm. | The requirement shall be finalized during detailed engineering subject to the approval of the Engineer. |
| 169. | For Lot-1<br>Part 2: Employer's Requirements<br>B1.2 , Chapter 1 : GIS Technical Specification, Clause no. 12.28.10<br>*The crane shall be possible to be operated through the cable, through the pendant control which shall be easily accessible from the floor of GIS building and through remote control device.* | The Bidder understands that EOT Crane for 400KV GIS Hall & 220KV GIS Hall shall be operated through Pendent & Radio Remote Control. Operator cabin shall not be provided for Crane. Please confirm. | Confirmed. |
| 170. | For Lot-1<br>Part 2: Employer's Requirements<br>B1.2 , Chapter 1 : GIS Technical Specification, Clause no. 12.28 | It is not clearly mentioned in the Technical Specification that, Crane shall be Single Girder Type or Double Girder Type So, the bidder is considering Single Girder EOT Crane for 400KV GIS Hall & 220KV GIS Hall. Please confirm. | The requirement of the type of girder will be finalized during detailed engineering subject to the approval of the Engineer. |
| 171. | For Lot-1<br>Part 2: Employer's Requirements<br>B1.2 , Chapter 5 : Fire Protection System Specification, Clasue no. 2.13.b<br>*Minimum set point of the heat detectors used in the HVW spray system shall be 790C. The optimum rating shall, however, be selected by the Bidder, keeping in mind the* | The Bidder understands that minimum set point of the heat detectors used in HVW spray 79 °C. Please confirm. | Minimum set point of the heat detectors used in the HVW spray system shall be $79^0$C. The optimum rating shall, however, be selected by the Bidder, keeping in mind the maximum and minimum temperature attained at site. |

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| | *maximum and minimum temperature attained at site.* | | |
| 172. | For Lot-1<br>Part 2: Employer's Requirements<br>B1.2 , Chapter 5 : Fire Protection System Specification, Clasue no. 2.14<br>*FIRE DETECTION AND ALARM SYSTEM* | As per Technical Specification, the bidder understands, that, Conventional Type Fire Detection & Alarm System shall be envisaged for this project. Please confirm | FDA shall be designed by Contractor meeting the technical specifications and is subject to approval by the Engineer during implementation. |
| 173. | For Lot -1<br>Part 1 & Part 2: Employer's Requirements<br>Section IV. Bid Submission Forms, LOT 1- TECHNICAL DATA SCHEDULE FOR RATMATE Substation, Technical Datasheet, 30. FIRE PROTECTION SYSTEM, Clause no. 2<br>&<br>B1.2 , Chapter 5 : Fire Protection System Specification, Clause 1.2<br>*2.3. Infra Red Sensors*<br>*2.4. Air Sampling Smoke Detection System*<br>*2.5. Arc Detector System*<br><br>*&*<br>*Scope of Supply* | There is discrepancy in the referred section of Tender documents. As per Technical Specification scope of supply of Fire Protection System, IR Detector, Arc Detector & Air sampling Smoke Detection System is not required, However in Part-1 Technical Datasheet, detail of the same has been asked. Please clarify the requirement.<br>Also, clarify, where IR Detector, Arc Detector & Air sampling Smoke Detection System is required in Substation area. | Fire protection system has to comply with the technical specifications and fire protection standards. All fire detection sensors (heat, smoke, etc.) specified in the technical specification have to be provided. Fire protection system design will be subject to approval by the Engineer. |
| 174. | For Lot-1<br>Part 2: Employer's Requirements | As per Technical Specification, CO2 Extinguishing System shall be provided, however, it is not clear that, in which Room same | CO2 Extinguishing should not be used in spaces with personnel presence. Clean |

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| | B1.2 , Chapter 5 : Fire Protection System Specification, Clause no. 2.16-c<br>*CO2 Extinguishing Systems* | shall be provided. Please clarify the Room CO2 Extinguishing System shall be provided. | agent should be used in rooms with personnel occupancy |
| 175. | For Lot-1<br>Part-1 and Part 2: Employer's Requirements<br>Section IV. Bid Submission Forms, LOT 1- TECHNICAL DATA SCHEDULE FOR RATMATE Substation, Technical Datasheet, 30. FIRE PROTECTION SYSTEM, Clean-Agent Fire Extinguishing System for Control Building.<br>&<br>B1.2 , Chapter 5 : Fire Protection System Specification, Clause 1.2<br>*3.0 Clean-Agent System for Control Room*<br>*4.0 Clean-Agent System for Telecoms Room*<br>*5.0 Clean-Agent System for Protection and Control Rooms* | As per referred clause of Technical Datasheet, the bidders understands that, Clean agent System shall be provided in folllowing Room at Ratmate SS:<br>1. Control Room (SAS Panel Room in Control Building)<br>2. Telecom Room (Communication Server Room in Control Building)<br>3. Protection and Control Rooms (400KV Relay & Control Room in GIS Building).<br>4. Protection and Control Rooms (220KV Relay & Control Room in GIS Building).<br><br>Clean Agent System shall not be provided for any other Room/Panel room Shown in Control Building Drawing & GIS Building. Please confirm. Incase same is required for any other room, Please specify the room clearly. | Clean agent should be used in rooms with personnel occupancy |
| 176. | Lot – 2<br>Part 2: Employer's Requirements<br>B1.2 , Chapter 19 : Air conditioning specification, Clause no. 1.b<br>*Contractor shall provide all necessary design, engineering, drawing and construction of all VAC systems at the sub-station* | The Bidder understands that AHU type ventilation system to be considered for 400KV GIS Hall with 2 Air changes/hr. Please confirm. | Please refer response to clarification for S.N. 166 |

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| 177. | Lot-2<br>General | The Bidder assumes that Ventilation through propeller type Exhaust fan for following rooms only:<br>1. ACDB/DCDB Room<br>2. Kitchen/Pantry<br>3. Toilets | Please refer response to clarification for S.N. 167. |
| 178. | For Lot-2<br>Part 2: Employer's Requirements<br><br>B1.2 , Chapter 19 : Air conditioning specification | The Bidder understands that, Heating system is not envisaged for this tender as per Chapter 19-Technical Specification of Air Conditioning System . Please confirm. | Please refer response to clarification for S.N. 168 |
| 179. | For Lot-2<br>Part 2: Employer's Requirements<br>B1.2 , Chapter 1 : GIS Technical Specification, Clause no. 12.28.10<br>*The crane shall be possible to be operated through the cable, through the pendant control which shall be easily accessible from the floor of GIS building and through remote control device.* | The Bidder understands that EOT Crane for 400KV GIS Hall shall be operated through Pendent & Radio Remote Control. Operator cabin shall not be provided for Crane. Please confirm. | Please refer response to clarification for S.N. 169 |
| 180. | For Lot-2<br>Part 2: Employer's Requirements<br>B1.2 , Chapter 1 : GIS Technical Specification, Clause no. 12.28 | It is not clearly mentioned in the Technical Specification that, Crane shall be Single Girder Type or Double Girder Type So, the bidder is considering Single Girder EOT Crane for 400KV GIS Hall & 220KV GIS Hall. Please confirm. | Please refer response to clarification for S.N. 170 |
| 181. | For Lot-2<br>Part 2: Employer's Requirements<br>B1.2 , Chapter 5 : Fire Protection System Specification, Clasue no. 2.13.b<br>*Minimum set point of the heat detectors used in the HVW spray* | The Bidder understands that minimum set point of the heat detectors used in HVW spray 79 ℃. Please confirm. | Please refer response to clarification for S.N. 171 |

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| | *system shall be 790C. The optimum rating shall, however, be selected by the Bidder, keeping in mind the maximum and minimum temperature attained at site.* | | |
| 182. | For Lot-2<br>Part 2: Employer's Requirements<br>B1.2 , Chapter 5 : Fire Protection System Specification, Clasue no. 2.14<br>*FIRE DETECTION AND ALARM SYSTEM* | As per Technical Specification, the bidder understands, that, Conventional Type Fire Detection & Alarm System shall be envisaged for this project. Please confirm | Please refer response to clarification for S.N. 172 |
| 183. | For Lot -2<br>Part 1 & Part 2: Employer's Requirements<br>Section IV. Bid Submission Forms, LOT 2- TECHNICAL DATA SCHEDULE FOR RATMATE Substation, Technical Datasheet, 30. FIRE PROTECTION SYSTEM, Clause no. 2<br>&<br>B1.2 , Chapter 5 : Fire Protection System Specification, Clause 1.2<br>*2.3. Infra Red Sensors*<br>*2.4. Air Sampling Smoke Detection System*<br>*2.5. Arc Detector System*<br><br>*&*<br>*Scope of Supply* | There is discrepancy in the referred section of Tender documents. As per Technical Specification scope of supply of Fire Protection System, IR Detector, Arc Detector & Air sampling Smoke Detection System is not required, However in Part-1 Technical Datasheet, detail of the same has been asked. Please clarify the requirement.<br>Also, clarify, where IR Detector, Arc Detector & Air sampling Smoke Detection System is required in Substation area. | Please refer response to clarification for S.N. 173 |

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| 184. | For Lot-2<br>Part 2: Employer's Requirements<br>B1.2 , Chapter 5 : Fire Protection System Specification, Clause no. 2.16-c<br>*CO2 Extinguishing Systems* | As per Technical Specification, CO2 Extinguishing System shall be provided, however, it is not clear that, in which Room same shall be provided. Please clarify the Room CO2 Extinguishing System shall be provided. | Please refer response to clarification for S.N. 174 |
| 185. | For Lot-2<br>Part-1 and Part 2: Employer's Requirements<br>Section IV. Bid Submission Forms, LOT 2- TECHNICAL DATA SCHEDULE FOR RATMATE Substation, Technical Datasheet, 30. FIRE PROTECTION SYSTEM, Clean-Agent Fire Extinguishing System for Control Building.<br>&<br>B1.2 , Chapter 5 : Fire Protection System Specification, Clause 1.2<br>*3.0 Clean-Agent System for Control Room*<br>*4.0 Clean-Agent System for Telecoms Room*<br>*5.0 Clean-Agent System for Protection and Control Rooms* | As per referred clause of Technical Datasheet, the bidders understands that, Clean agent System shall be provided in following Room at New Butawal SS:<br>1. Control Room (SAS Panel Room in Control Building)<br>2. Telecom Room (Communication Server Room in Control Building)<br>3. Protection and Control Rooms (400KV Relay & Control Room in GIS Building).<br><br>Clean Agent System shall not be provided for any other Room/Panel room Shown in Control Building Drawing & GIS Building. Please confirm. Incase same is required for any other room, Please specify the room clearly. | Please refer response to clarification for S.N. 175 |
| 186. | Lot – 3<br>Part 2: Employer's Requirements<br>B1.2 , Chapter 19 : Air conditioning specification, Clause no. 1.b<br>*Contractor shall provide all necessary design, engineering,* | The Bidder understands that AHU type ventilation system to be considered for 400KV GIS Hall with 2 Air changes/hr. Please confirm. | Please refer response to clarification for S.N. 166 |

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| | *drawing and construction of all VAC systems at the sub-station* | | |
| 187. | Lot-3<br>General | The Bidder assumes that Ventilation through propeller type Exhaust fan for following rooms only:<br>1. ACDB/DCDB Room<br>2. Kitchen/Pantry<br>3. Toilets | Please refer response to clarification for S.N. 167. |
| 188. | For Lot-3<br>Part 2: Employer's Requirements<br><br>B1.2 , Chapter 19 : Air conditioning specification | The Bidder understands that, Heating system is not envisaged for this tender as per Chapter 19-Technical Specification of Air Conditioning System . Please confirm. | Please refer response to clarification for S.N. 168 |
| 189. | For Lot-3<br>Part 2: Employer's Requirements<br>B1.2 , Chapter 1 : GIS Technical Specification, Clause no. 12.28.10<br>*The crane shall be possible to be operated through the cable, through the pendant control which shall be easily accessible from the floor of GIS building and through remote control device.* | The Bidder understands that EOT Crane for 400KV GIS Hall shall be operated through Pendent & Radio Remote Control. Operator cabin shall not be provided for Crane. Please confirm. | Please refer response to clarification for S.N. 169 |
| 190. | For Lot-3<br>Part 2: Employer's Requirements<br>B1.2 , Chapter 1 : GIS Technical Specification, Clause no. 12.28 | It is not clearly mentioned in the Technical Specification that, Crane shall be Single Girder Type or Double Girder Type So, the bidder is considering Single Girder EOT Crane for 400KV GIS Hall. Please confirm. | Please refer response to clarification for S.N. 170 |
| 191. | For Lot-3<br>Part 2: Employer's Requirements | The Bidder understands that minimum set point of the heat detectors used in HVW spray 79 ℃. Please confirm. | Please refer response to clarification for S.N. 171 |

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| | B1.2 , Chapter 5 : Fire Protection System Specification, Clasue no. 2.13.b<br>*Minimum set point of the heat detectors used in the HVW spray system shall be 790C. The optimum rating shall, however, be selected by the Bidder, keeping in mind the maximum and minimum temperature attained at site.* | | |
| 192. | For Lot-3<br>Part 2: Employer's Requirements<br>B1.2 , Chapter 5 : Fire Protection System Specification, Clasue no. 2.14<br>*FIRE DETECTION AND ALARM SYSTEM* | As per Technical Specification, the bidder understands, that, Conventional Type Fire Detection & Alarm System shall be envisaged for this project. Please confirm | Please refer response to clarification for S.N. 172 |
| 193. | For Lot -3<br>Part 1 & Part 2: Employer's Requirements<br>Section IV. Bid Submission Forms, LOT 3- TECHNICAL DATA SCHEDULE FOR RATMATE Substation, Technical Datasheet, 30. FIRE PROTECTION SYSTEM, Clause no. 2<br>&<br>B1.2 , Chapter 5 : Fire Protection System Specification, Clause 1.2<br>*2.3. Infra Red Sensors*<br>*2.4. Air Sampling Smoke Detection System*<br>*2.5. Arc Detector System* | There is discrepancy in the referred section of Tender documents. As per Technical Specification scope of supply of Fire Protection System, IR Detector, Arc Detector & Air sampling Smoke Detection System is not required, However in Part-1 Technical Datasheet, detail of the same has been asked. Please clarify the requirement.<br>Also, clarify, where IR Detector, Arc Detector & Air sampling Smoke Detection System is required in Substation area. | Please refer response to clarification for S.N. 173 |

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| | *&*<br>*Scope of Supply* | | |
| 194. | For Lot-3<br>Part 2: Employer's Requirements<br>B1.2 , Chapter 5 : Fire Protection System Specification, Clause no. 2.16-c<br>*CO2 Extinguishing Systems* | As per Technical Specification, CO2 Extinguishing System shall be provided, however, it is not clear that, in which Room same shall be provided. Please clarify the Room CO2 Extinguishing System shall be provided. | Please refer response to clarification for S.N. 174 |
| 195. | For Lot-3<br>Part-1 and Part 2: Employer's Requirements<br>Section IV. Bid Submission Forms, LOT 3- TECHNICAL DATA SCHEDULE FOR RATMATE Substation, Technical Datasheet, 30. FIRE PROTECTION SYSTEM, Clean-Agent Fire Extinguishing System for Control Building.<br>*&*<br>B1.2 , Chapter 5 : Fire Protection System Specification, Clause 1.2<br>*3.0 Clean-Agent System for Control Room*<br>*4.0 Clean-Agent System for Telecoms Room*<br>*5.0 Clean-Agent System for Protection and Control Rooms* | As per referred clause of Technical Datasheet, the bidders understands that, Clean agent System shall be provided in following Room at New Damauli SS:<br>1. Control Room (SAS Panel Room in Control Building)<br>2. Telecom Room (Communication Server Room in Control Building)<br>3. Protection and Control Rooms (400KV Relay & Control Room in GIS Building).<br><br>Clean Agent System shall not be provided for any other Room/Panel room Shown in Control Building Drawing & GIS Building. Please confirm. Incase same is required for any other room, Please specify the room clearly. | Please refer response to clarification for S.N. 175 |
| 196. | Not used. | | |

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| 197. | Section 3: Qualification and Evaluation Criteria<br>Sub Factor 11: Annual Average Turnover<br>*2. Minimum average annual design turnover of*<br>*Lot 1: US$ 150,000*<br>*Lot 2: US$ 100,000*<br>*Lot 3: US$ 100,000,*<br>*Calculated. as total certified payments received for contracts in progress or completed, within the last three (3) years. Values to determine annual design turnover are to be demonstrated in the audited financial statements (income statements) of the last three (3) years and are to be considered /to be indicative. To be eligible for award of more than one lot,the bidder needs to satisfy the total requirements for the lots in consideration.* | In an EPC contract (which consist design, engineering supply, erection, testing and commissioning) no separate amount for design charges are indicated. So it will not be possible to establish design turnover separately. Kindly waive off the clause. | MCA-Nepal is intending to amend the bidding document to accept a Chartered Accountant Certificate for certifying the design turnover, after receiving approval from authority. |
| 198. | Section 3: Qualification and Evaluation Criteria<br>Sub Factor 13: General Design Experience<br>*Experience under contracts in the role of designer for at least the last ten (10) years prior to the Bid submission deadline, and with activity in at least nine (9) months in each year.* | Bidder proposed QR as:<br>Experience under contracts in the role of designer for at least the last ~~ten (10)~~ 5 years prior to the Bid submission deadline, ~~and with activity in at least nine (9) months in each year.~~ | The requirement will not change. Bidders are requested to adhere to the qualification requirement. |

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| 199. | Section 3: Qualification and Evaluation Criteria<br>Sub Factor 14: General Construction Experience<br>*Experience under contracts in the role of contractor, subcontractor, or management contractor for at least the last ten (10) years prior to the Bid submission deadline, and with activity in at least nine(9) months in each year.* | Bidder proposed QR as:<br>Experience under contracts in the role of contractor, subcontractor, or management contractor for at least the last ~~ten (10)~~ 5 years prior to the Bid submission deadline, ~~and with activity in at least nine (9) months in each year.~~ | The requirement will not change. Bidders are requested to adhere to the qualification requirement. |
| 200. | Section 3: Qualification and Evaluation Criteria<br>Sub Factor 16: Similar Construction Experience<br>*Successfully completed at least three (3) turnkey or design-build substation projects within the last ten 10 years for each lot, (a) of below mentioned value:*<br>*for Lot 1: US$34 Million (3 Contracts each of US$ 34 Million or above)*<br>*for Lot 2: US$ 20 Million (3 Contracts each of US$ 20 Million or above)*<br>*for Lot 3: US$ 21 Million (3 Contracts each of US$ 21 Million or above)* | Bidder proposed QR as:<br>Successfully completed at least three (3) turnkey or design-build substation projects within the last ten 10 years for each lot, (a) of below mentioned value:<br>for Lot 1: US$12 Million (3 Contracts each of US$ 12 Million or above)<br>for Lot 2: US$12 Million (3 Contracts each of US$ 12 Million or above)<br>for Lot 3: US$12 Million (3 Contracts each of US$ 12 Million or above)<br>(b) Participation as single entity or as joint venture partner in at least ~~three (3)~~ two (2) turnkey contract/design<br>and build constructing GIS substations of voltages 380kV or above and 50kA short circuit level or higher and the | Bidders are requested to refer to Addendum #2. |

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| | *(b) Participation as single entity or as joint venture partner in at least three (3) turnkey contract/design and build constructing GIS substations of voltages 380kV or above and 50kA short circuit level or higher and the same should be in successful operation for each lot. To be eligible for award of more than one lot, the bidder needs to satisfy the total requirements for the lots in consideration.*<br>*(c) Participation as single entity or as joint venture partner in at least three (3) turnkey contracts, at least one being in a South Asian country for each lot.*<br>*(d) Supply, delivery, installation, testing and commissioning of at least cumulative 1000MVA three phase (or equivalent capacity in bank of three single phase units) auto/power transformer of 380 kV or higher EHV side and the same should be in successful operation for each lot.*<br>*Evidence shall be given by end users or taking over certificates. All contracts must have been successfully and substantially completed with at least one (1) of them being outside the* | same should be in successful operation for each lot. To be eligible for award of more than one lot, the bidder<br>needs to satisfy the total requirements for the lots in consideration.<br>(c) Participation as single entity or as joint venture partner in at least three (3) turnkey contracts, at least one<br>being in a South Asian country for each lot.<br>(d) Supply, delivery, installation, testing and commissioning of at least cumulative ~~1000MVA~~ 630 MVA three phase (or equivalent capacity in bank of three single phase units) auto/power transformer of 380 kV or higher EHV side and the same should be in successful operation for each lot.<br>Evidence shall be given by end users or taking over certificates. All contracts must have been successfully and substantially completed with ~~at least one (1) of them being outside the contractor's home country~~. All contracts should have features similar to the proposed plant and services. The similarity shall be based on the physical size, complexity, methods/ technology or other characteristics as described in SectionV, Employer's Requirements. | |

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| | *contractor'shome country. All contracts should have features similar to the proposed plant and services. The similarity shall be based on the physical size,complexity, methods/ technology or other characteristics as described in SectionV, Employer's Requirements.* | | |
| 201. | General<br>Form ELI-3: Government-Owned Enterprise Certification Form | The Bidder is requesting to kindly review the completely filled form ELI-3 and let them know whether they can submit their bid or not. Also the bidder is informing that his firm is a Govt. of India (GOI) undertaking having legal and financial autonomy and function under the commercial laws to perform its operations. | The filled GoE form is reviewed by MCC during evaluation. For GoE requirement you are requested to refer Part 13 of MCC Program Procurement Guidelines which can be currently accessed at: https://assets.mcc.gov/content/uploads/guidance-2020001236804-procurement-program.pdf<br><br>The request of the bidder to review the filled-out form before the submission and evaluation of proposals cannot be entertained. |
| 202. | SPN: Part-1/ Section – III, Qualification and Evaluation Criteria<br>*Subcontractors / Manufacturers - III*<br>*Manufacturer shall also have supplied at least three (3) Gas Insulated Switchgear of 220kV or above voltage class equipment* | The Bidder wish to inform that they are one of reputed global GIS manufacturers and have huge installation base of GIS in home country. Also, they have global references/footprint and huge installation base of GIS supplied from their collaborator/group companies.<br>With reference to above, the bidder request to kindly accept the manufacturers who have either already supplied or have project under execution | Please refer to Addendum #2. The requirement is not expected to change. |

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| | *during last 10 years outside the Manufacturer's home country and which should be in successful operation*<br><br>*Subcontractors / Manufacturers - IV*<br>*The above-criteria (I, II, and III) would also be applicable to Gas Insulated Bus ducts (GIB).* | for at least 3 GIS station (including busduct, if applicable) of 220kV level or above voltage class outside the manufacturer's home country during last 10 years. Kindly accept. | |
| 203. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS<br>CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 1.1 b<br>*The autotransformers furnished under these specifications shall be in accordance with all the requirements of IEC 60076, all parts.* | Transformer shall be in accordance with requirements of IEC 60076 all parts. This is for our information. | Noted. |
| 204. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS<br>CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION<br>Cl. 1.1 c<br>*c. The autotransformers shall be equipped with all necessary equipment and controls to allow parallel operation with other* | please note that Offered Transformer shall be suitable for parallel operation with similar transformer having same parameters to meet parallel operation criteria. This is for our information. | Confirmed. |

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| | *OLTC equipped transformers using the circulating current method* | | |
| 205. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 1.1 f *f. The Contractor shall ship the autotransformer filled with oil or in an atmosphere of nitrogen or dry air to prevent the ingress of moisture during transportation. In the former case the contractor shall comply with the weight limitation on transport to the site and handling facilities at the substation.* | Is their any Transformer overall Dimension limitations & Transport Dimensions or transport weight limitations? If yes please specify | Design of the transformer is in the present scope of works. Dimension of the same shall be finalized during the detailed engineering. Bidders need to have an idea about the approx. dimensions of such transformers as well as transportation weight etc. Further, it is the responsibility of the bidders to check those against existing road and bridge conditions. |
| 206. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 2.3.1. *LOSS CAPITALIZATION* | The bidder understands losses shall be offered as per capitalization rates given in this clause. If transformer to be designed with any fixed maximum losses, please define. | The Contractor shall guarantee that the autotransformers comply with the performance stated in the Technical Data Sheets. Tolerances shall not exceed the values specified in IEC 60076 or those listed in the Technical Data Sheets. The autotransformer losses will be capitalized at rates given in the bid documents for evaluation purposes. |

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| 207. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 3.1 a.iv *iv. The auto transformers shall be of the bell type tank* | The bidder proposes to offer this transformer with conventional type of tank with bolted top cover due to the following reasons:<br>a) Any inspection at site can be easily carried out by removing top cover and inspection covers.<br>b) If they supply with bell tank design, the gasket joint which is at tank bottom side will continuously see excessive oil pressure head and there will be more chances of oil leakage. Due to this reason many customers prefer conventional tanks even for higher ratings.<br>c) They have supplied upto 500MVA 400kV with conventional tank with bolted top cover to various utilities in India.<br>In view of the above the bidder request us to kindly accept the tank with conventional, bolted top cover construction.. | The provision in the bid will not change. |
| 208. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 3.1 h.ii.b *b. Any special cable required for shielding purpose, for connection between cooler control cabinet and remote WTI control circuit, shall be in scope of Contractor.* | The bidder scope of supply of cable is limited from transformer accessories to marshalling box only. Further distance to control room is not known at this stage so supply of special shielded cable from MB to remote WTI in RTCC is not in their scope. | This contract is for turn-key substation work, not for autotransformer supply. Everything external to the transformer is also in the scope. |

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| 209. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 3.3 f *f. The winding resistance shall not vary from phase to phase by more than 1%* | Winding resistance variance between phases depend on various factor like tolerance on conductor dimension effecting area, tolerance on proof stress effecting conductivity, and cable length for vector connection and surface contact at lug/various connections. So, variation of 1% is not possible. It will be as per measurement at actuals without effecting principal guaranteed parameters like losses. | Please refer response to clarification for S.N. 145. |
| 210. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 3.5 a xii & xiii *(xii. Suitable insulating cap (preferably of porcelain) shall be provided on the terminal of tertiary winding bushings to avoid accidental external short circuit.* *xiii. Surge s with brackets shall be mounted in the tertiary compartment of the transformers and connected to the tertiary bushings* | Surge arrestor and its brackets on tertiary not in our scope.<br>And No insulating caps provided on tertiary.<br>Please clarify requirement of tertiary compartment and confirm requirement of air filled cable box on tertiary. | It is confirmed that no insulating caps will be provided on tertiary.<br>Tertiary compartment requirement is confirmed and cable boxes shall be air insulated. They shall be of sufficient size to accommodate cables to be connected. Cable boxes shall have suitable removable side/top cover to facilitate cable termination and inspection. |
| 211. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 3.5 b | The bidder understands that, Bushing (HV,MV,TV, Neutral) terminations is through oil-to-air bushings. Further connection to GIS is not in our scope. | Confirmed. Oil to air bushings are required.<br><br>This contract is for turn-key substation work, not for autotransformer supply. |

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| | *b. The transformer terminals shall be designed to connect to GIS to air bushings using open air flexible conductors and standard terminal pads.* | | Everything external to the transformer is also in the scope. |
| 212. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 3.7 a *....Provision shall be made for protection against GIC induced currents, such as DC CT on the neutral on other appropriate method.* | Kindly provide GIC current magnitude to confirm. Also note that, DC CT parameter required for getting quotation. Any external CT and its supports are not in our scope of supply. | The Engineer will define with the Contractor the characteristics of GIC protection at the design review stage. The Bidders should understand that this contract is not only for autotransformer supply but is a turn-key substation work, everything external to the transformer is also in the scope. |
| 213. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 3.3 b & Cl. 3.8 ii *Cl. 3.3 b. .....All windings shall be furnished with insulation that will permit continuous operation at a winding rise of 55°C above ambient and a hotspot rise of 90°C above ambient without affecting the normal life expectancy of insulation.* | Both clauses are contradictory. Please confirm temperature rise requirement of avg. winding, top oil and hot-spot winding rise. | MCA-Nepal may issue an addendum to correct the ambiguity in the Bidding Document after receiving approval from the authority as follow:<br>Winding temperature rise by resistance shall not exceed 55°C and hottest spot winding temperature rise shall not exceed 90°C for the full range of transformer operation. |

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| | *Cl. 3.8 ii. Winding temperature rise by resistance shall not exceed 65° C and hottest spot winding temperature rise shall not exceed 80° C for the full range of transformer operation.* | | |
| 214. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 5.1 b viii *viii. Check on completed core for measurement of iron loss and check for any hot spot by exciting the core so as to induce the designed value of flux density in the core* | Bidders manufacturing plant was set up as per latest manufacturing facilities of abc plants in abc and hence their core stacking table and hydraulic lifting jigs were designed similar to the ones available in abc. They build the core as per abc global practice and standards and their principals do not recommend to build the core with top yoke lamination as double handling of top yoke lamination may introduce stress in laminations, negatively affecting the magnetic properties of core. Similarly the accuracy of measurements will not be good as the dummy coils will not simulate actual conditions of windings. They once again confirm that actual no load losses will be as per guaranteed value which may be checked during final testing. Hence bidder request us to delete this requirement during inspection. | The requirement in the Bidding Document will not change. Bidders are requested to kindly adhere to the requirement of the Bidding Document. |
| 215. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 5.2 note C. i *i. Bushing (Type Test per IEC 60137, including snap back/seismic test)* | The bidder understands that, this is requirment for 400kV and above OIP bushings only. Please confirm | MCA-Nepal may issue an addendum after approval from the authority with following:<br>Bushing (Type Test as per IEC:60137 including Snap back & Seismic test for 400 kV and above voltage class bushing) |

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| 216. | 220913_Lot1_RAT_TS,<br>220913_Lot2_NBW_TS,<br>220913_Lot3_NDM_TS<br>CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION<br>&<br>Bidding Document Technical Data Sheet<br>Auto Transformer Technical Data Sheet<br>Cl. 5.2 note C. v<br>&<br>Technical Data Sheet Sl.No.6<br>*Cl. 5.2 C v. Check for mis-operation of the Buchholz relay due to simultaneous operation of oil pumps.*<br>&<br>*Technical Data Sheet Sl.No.6 : Cooling: ONAN / ONAF / OFAF* | Considering following disadvantages while using oil pumps, Here bidder is offering ONAN/ONAF1/ONAF2 cooling instead of ONAN/ONAF/OFAF cooling,<br><br>1. Oil pumps often require a separate foundation for supporting pump and attached large pipe network from ground.<br>2. Oil pumps need continual maintenance during operation as for any rotary equipment. Since hot oil is continuously circulated through it, frequent monitoring is required for any oil leakage.<br>3. Oil pumps consume more auxiliary power in comparison to corresponding consumption by extra cooling fans required in the event of eliminating oil pump.<br>4. In case of a gasket leak during service, air can be sucked through pipe joints in the suction side of pumps which gets mixed up with circulating oil and can be an entry point for moisture into transformer. Several gasket joints in pipe network result in many such moisture entry points.<br>5. In case of shifting of transformer from one location to another location, pumps and its pipe network require proper handling and care.<br>6. We have supplied upto 500MVA 400kV with ONAN/ONAF1/ONAF2 cooling to various utilities in India.<br><br>Customer to kindly review and accept the same. Note that mis-operation of buchholz relay is not applicable in case of proposed ONAN/ONAF1/ONAF2 cooling. | The requirement of the bidding document will not change. |

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| 217. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 5.2 note C. viii *Cl. 5.2 C viii. The pressure relief device of each size shall be subjected to increase in oil pressure. It shall operate before reaching the test pressure specified in the autotransformer tank pressure test above..* | PRD operation check will be done by air separately without mounting on Transformer. | Agreed. Test report to be submitted. |
| 218. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 5.3 *5.3. INSPECTION AND TESTING AT SITE.* | INSPECTION AND TESTING AT SITE is not in bidders scope of supply | It is in the scope of works of Contractor. |
| 219. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 6 *6.SPARE PARTS AND MAINTENANCE EQUIPMENT table 8* | Only spares mentioned in table 8 considered. No other special tools & tackles are recommended hence not considered.<br>And note that, item "Vacuum and oil processing equipment required for filling and maintenance" mentioned in table8 is not in our scope of supply. | The Bidder shall recommend any additional spare parts or maintenance equipment normally required for the operation and maintenance of the autotransformers. Calibration certificates of all maintenance equipment shall be supplied along with the equipment.<br>Ultra-High Vacuum Type Mobile Oil treatment plant of capacity >/= 6000 Liter Per Hour is in the Bidders' scope of supply. |

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| 220. | 220913_Lot1_RAT_TS,<br>220913_Lot2_NBW_TS,<br>220913_Lot3_NDM_TS<br>CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION<br>*General* | Transformer is in-line to technical specification Chapter 3: Autotransformer Specification. The bidder understands that all other chapters of this specification are not applicable specific to transformers and are not in our scope of supply. | The bid is for SS turn-key contract, not for autotransformer supply. All other chapters, even if they are not applicable specific to the transformers, are in the bidders' scope of supply. |
| 221. | Bidding Document Technical Data Sheet Auto Transformer Technical Data Sheet Technical Data Sheet Sl.No.17.2<br>*17.2 - changer shall be located on the HV side of the series winding for achieving ± 10% using 17 (8 plus, 8 minus, nominal) steps of 1.25%. It shall be of constant flux voltage variation type as per CI.3.2 of IS:2026 Part- IV-1977* | The bidder understands that, tap changer is required for HV variation and is located at common end of series winding to achieve constant ohmic impedance requirement. Please confirm | On Load Tap changer shall be provided for variation of voltage on HV side of +- 10% using 17 (8 plus, 8 minus, nominal) steps of 1.25% each, provided on common end of series winding. *It shall be of constant flux voltage variation type as per CI.3.2 of IS:2026 Part- IV-1977* |
| 222. | 220913_Lot1_RAT_TS,<br>220913_Lot2_NBW_TS,<br>220913_Lot3_NDM_TS<br>CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION<br>&<br>Bidding Document Technical Data Sheet<br>Auto Transformer Technical Data Sheet<br>3.14. DISSOLVED GAS AND MOISTURE MONITOR table 6<br>&<br>Technical Data Sheet Sl.No.25 | Both clauses are contradictory. As per Technical specification 8gas + moisture online DGA is required and as per technical data sheet 4 gas GE-HYDRAN M2 or equivalent model is required. Please confirm which one to follow. | Kindly adhere to the requirement stated in Clause 3.14 of Chapter 3 Auto Transformer of Technical Specification (TS) volume. The ambiguity in the bidding document in the Technical Data Sheet will be corrected through issuing an Addendum to the Bidding Document, after receiving approval from authority. |

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| | *Table 6 : 8 gasses + H20*<br>*25. Online dissolved gas and moisture monitoring device (DGA Monitoring): GE-HYDRAN M2 or equivalent* | | |
| 223. | Bidding Document<br>*General* | The Bidder understands that, in this document only technical data sheets of AUTOTRANSFORMER SPECIFICATION is applicable and no other specifications of this document are applicable to transformers and hence not considered in our scope of supply. | The understanding of the bidder is incorrect. The bid is for SS turn-key contract, not for autotransformer supply. All other chapters, even if they are not applicable specific to the transformers, are in the bidders' scope of supply. |
| 224. | 221123_Lot1_RAT_PSR,<br>221123_Lot2_NBW_PSR,<br>221123_Lot3_NDM_PSR<br>*Seismic Condition*<br>*Seismic Acceleration*<br>*(PGA: peak ground acceleration)*<br>*0.50 g* | Please confirm seismic acceleration value. Mentioned acceleration is high. They propose to offer RIP bushing due to high seismic acceleration. | Kindly adhere to the requirement of the bidding document. |
| 225. | Part 2: Employer's Requirements Section V – B0 (General Technical Requirement) Cl. 10<br>*TYPE TESTING, INSPECTION, TESTING & INSPECTION CERTIFICATE* | For Power/ Auto Transformers, please confirm if type tests reports of similar or higher rating transformer are acceptable. | Please adhere to the type test requirement as mentioned in the document. |
| 226. | General<br>*Short Circuit (S.C) withstand* | The bidder do not envisage any S.C test for the transformer. Also, they do not envisage any SC similarity as per IEC 60076 Part -5. They will submit S.C withstand calculations in the event of order to demonstrate S.C capability of the transformer. This is for our information | Noted. |

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| 227. | General<br>*Radiator* | They are offering radiators with 1.0mm standard thickness with paint as per their standard practice. | Offer is not accepted. Kindly adhere to the requirements of the bid. |
| 228. | General<br>*Type Test* | The bidder do not envisage repetition of type test for transformer accessories. Type test report available for transformer accessories shall be submitted for reference purpose without any limitation on validity. | The requirement of Type test report for transformer accessories will be issued through issuance of an addendum to the Bidding document after receiving approval from the authority. MCA-Nepal is anticipating including the requirement in the bidding document as follows: Type test report for transformer accessories should not be more than 5 years old. |
| 229. | General<br>*Vendor List* | All the transformer accessories shall be of Indigenous make as per abc approved vendor list. | Transformers accessories except OLTC can be supplied as per OEM approved vendor list subject to the approval of the Engineer. |
| 230. | General<br>*Site Storage* | Note that, Preparation of indoor & outdoor storage space at site is not in Bidder's scope. Purchaser to provide suitable indoor & outdoor space for storage of transformers and accessories. | All site storage including maintenance and security of the equipment is in the scope of the contractor till handover activities. Bidders are advised to refer to relevant chapters of General Project Description for further clarifications. |
| 231. | General<br>*Painting* | Painting procedure on tank /radiators shall be as per abc standard practices and shall be suitable for the site condition. If we have any painting requirement, please share. | Agreed, painting procedure on tank /radiators shall be as per OEM standard practices and shall be suitable for the site conditions. |

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| 232. | General<br>*Scope of Work* | Following Items/ material is not consider in scope of supply:<br>a) Rail & Inserts for Transformer Foundations.<br>b) Support Structure, Support Insulators, Terminal Clamps&connector, Flexible Connectors etc. required for any other equipment.<br>b) Earthing Arrangement, Spare unit connection, Netural / Star / Delta Formation etc.<br>c) Oil Syringe, Oil Filter M/c, oil storage tank. etc.<br>d) Any special Tools & Tackles, Test Kit (BDV Test Kit, Portable DGA) etc.<br>e) Cable Tray, Tray support or any other accessories etc.<br>f) HVWS System, NIFPS, Fiber optic temp monitoring sysetm. NGR, Outdoor NCT, Circuit Breaker / Isolator, Surge Arrester, Oil dryout system, PD monitoring system etc.<br>g) Any Civil work<br>h) Any other item not included in above price schedule | a) All activities are in the scope of the Contractor.<br>b) Same as above<br>c) Same as above<br>d) Same as above<br>e) Same as above<br>f) Same as above<br>g) Same as above<br>h) Same as above<br><br>Further, please note that this contract is for turn-key substation work, not for autotransformer supply. Everything external to the transformer is also in the scope of work. |
| 233. | General<br>*Cable Scope* | a) Scope of supply for Power / Control / any Special cable / FO cable shall be limited from Transformer tank mounted accessories to Individual Marshalling Box (IMB).<br><br>b) Power /Control /any special Cable required for Interconnection from IMB to RTCC panel / control room/ SCADA Panel etc. shall not be under their scope. No special cable and accessories (i.e. LIU, Ethernet switch, FO cable etc.) are included in our scope for automation. Any material required to supply / perform for | a) All activities will be as per the scope of works defined in the PSR.<br>b) Same as above<br>c) Same as above<br><br>Please note that this contract is for turn-key substation works, not for autotransformer supply. Everything external to the transformer is also in the scope. |

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| | | integration with existing transformers or substation automation system for is not included in their scope. Also laying of cable is also not in our scope.<br><br>c) Supply and Integration of any existing spare units, if any, with new supplied Transformer/Reactor IMB & CMB is not considered in scope. | |
| 234. | Section IV. Bid Submission Forms 'Price Variation<br>*'Adjustment for 13.8*<br>*Changes in Cost* | Price adjustment formula specified for Auto/ Power Transformers has 40% is fixed component and 60% is variable. This 60% variation is covers variation of only Copper and CRGO. This won't cover manufacturer's full exposure towards commodity price variation. Other components like Mild Steel (MS), Oil, Insulation and Labour are also playes major role in transformer composition. In last two years, price of raw materials and international transportation has increased significantly and still their behavior is highly volatile. Hence, bidder request us to consider price variation of these commodities as well and reduce fixed component to reasonable value. Also, bidder recommend to follow IEEMA price variation formula for this. | MCA-Nepal will not amend the Bidding Document on this respect. |
| 235. | Price schedule : 221031_Lot3_NDM_PS_Base Schedule No. 4.3 : Breakdown of Civil Works<br>Price schedule : 221031_Lot1_Rat_PS_Base Schedule No. 4.3 : Breakdown of Civil Works | As per price schedule, the Portable Water System (Including Water Treatment Plant, Pumping Facilities, Storage Tank and all Required Facilities) is in bidders scope.<br>However the detailed specification and requirements for portable water system is not provided. | Design and Construction of the Water Treatment Plant, Pumping Facilities, Storage Tank and all Required Facilities including the volume of water to be considered for storage tank is in the present scope of works. The same shall be finalized during the detailed engineering subject to |

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| | Price schedule : 221031_Lot2_NBW_PS_Base Schedule No. 4.3 : Breakdown of Civil Works *'Cl.no: 4.3.2.11 4.3.2.10 4.3.2.12* | kindly provide the same. in order to estimate the quantum of work. | approval of the Engineer. MCA-Nepal may issue an addendum, if required after approval from the authority. |
| 236. | New Ratmate Substation, 221031_Lot1_Rat_PS_Base & 221123_Lot1_Rat_PS_Option & 2.7.1.14 | In referred line item, GIB & SF6-Air bushing for 220kV line bays are mentioned. Please check & clarify the requirement, as all the 220kV line bays are under future scope & only the respective 220kV GIS modules with indoor GIB are under present scope. Please confirm. | Kindly adhere to the requirements of the Bidding document. |
| 237. | New Ratmate Substation, 221031_Lot1_Rat_PS_Base & 221123_Lot1_Rat_PS_Option & 2.6.2.14 | Description of referred item is"Isolating & Earthing Switches, 400kV, 4000A, 50kA,Single phase, and Gas Insulated Bus (GIB) for Spare Transformer, with auxiliary Bus,GIS to AIS Bushing termination, jumpers, required CT, Al. tube, metering, control and protection as required all complete. "<br>Metering, Control & Protection are covered under BPS item 2.8. Please clarify under which line item the same need to be quoted? | MCA-Nepal may issue an addendum subject to the approval of Authority. |
| 238. | New Ratmate Substation, 221031_Lot1_Rat_PS_Base & 221123_Lot1_Rat_PS_Option & 2.7.2.14 | a) In referred clause, Isolating & Earthing switches for 220kV side of spare transformer is mentioned with voltage level "400kV". However the same to be provided for 220kV system. Please check & revise the BPS accordingly.<br><br>b) Description of referred item is "Isolating & Earthing Switches, 400kV, 4000A, 50kA,Single phase, and Gas Insulated Bus (GIB) for Spare Transformer, with auxiliary Bus, GIS to AIS | a) MCA-Nepal may issue an addendum subject to the approval of authority.<br>b) MCA-Nepal may issue an addendum subject to the approval of authority. |

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| | | Bushing termination, jumpers, required CT, Al. tube, metering, control and protection as required all complete. "<br>Metering, Control & Protection are covered under BPS item 2.8. Please clarify under which line item the same need to be quoted? | |
| 239. | New Damauli Substation, 221031_Lot3_NDM_PS_Base & 221123_Lot3_NDM_PS_Option & 2.6.2.1.14 | Description of referred item is"Isolating & Earthing Switches, 400kV, 4000A, 50kA,Single phase, and Gas Insulated Bus (GIB) for Spare Transformer, with auxiliary Bus,GIS to AIS Bushing termination, jumpers, required CT, Al. tube, metering, control and protection as required all complete. "<br>Metering, Control & Protection are covered under BPS item 2.7. Please clarify under which line item the same need to be quoted? | MCA-Nepal may issue an addendum subject to the approval of authority. |
| 240. | New Ratmate Substation, 221031_Lot1_Rat_PS_Base & 221123_Lot1_Rat_PS_Option, 2.14.1.13 & 2.14.1.14<br><br>New Butwal Substation, 221031_Lot2_NBW_PS_Base & 221123_Lot2_NBW_PS_Option, 2.13.1.7<br>New Damauli Substation 221031_Lot3_NDM_PS_Base & 221123_Lot3_NDM_PS_Option, 2.13.1.7 | The referred item is GIS Laptop computer with Specialized software for GIS setting and monitoring for respective voltage level.<br><br>Kindly confirm the requirement of referred line item, as it is mentioned for GIS setting & monitoring. Please elaborate & furnish technical specification for the same. | Bidders to propose the required operating and maintenance tools, including laptops for setting and monitoring, based on their experience. |
| 241. | New Ratmate Substation, 221031_Lot1_Rat_PS_Base & 221123_Lot1_Rat_PS_Option, 2.8.4.10 & 2.8.4.11 | a) The bidder shall consider Metering function as part of respective Bay Control Units (BCU) for each of the 400kV & 220kV bays.<br>b) Separate MFM or Tariff Energy Meters are not | a) Meters shall be of revenue metering accuracy class. BCU metering is not suitable. |

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| | New Butwal Substation, 221031_Lot2_NBW_PS_Base & 221123_Lot2_NBW_PS_Option, 2.7.4.10 & 2.7.4.11<br>New Damauli Substation, 221031_Lot3_NDM_PS_Base & 221123_Lot3_NDM_PS_Option, 2.7.3.9 | considered.<br>Please confirm.<br>If Tariff Energy Meters are required please furnish the technical specification indicating the accuracy class | MCA-Nepal may issue an addendum to include the specification of the Revenue meter subject to the approval of authority. |
| 242. | New Butwal 400/22/132/33/11kV Substation<br><br>Drawing no. NBW-200-1 - 400kV General arrangement | a) The Bidder presume that Main & Trasfer bus for 220kV Transformer bay extension is already available at site. Please confirm.<br>b) Incontinuation the above query, only 3 towers & 4 Gatries are required at 220kV side for 220kV Transformer bay extension. Please confirm.<br>c) As per referred layout, 4 nos. of tandem isolators are shown for 2 no. of 220kV Transformer bay extension. However as per BPS & SLD, The quantity for 220kV tandem isolators is 6 nos. Please confirm which one to be followed. | a) Confirmed.<br>b) Requirement will be finalized during detailed engineering subject to the approval of Engineer.<br>Number of the tandem isolators to be finalized during detailed engineering. Bidders are requested to follow the BPS. |
| 243. | New Ratmate Substation, 220913_Lot1_RAT_TS, Chapter-10, Section-2, clause 2.1, l | In referred clause, it is mentioned as "PROTECTION MODIFICATION AT THE REMOTE ENDS: Any modification needed for the CT's or devices shall be part of this contract. For remote end modifications, any modification needed in the protection panels, control panels/Station HMI shall be fully covered under the bidder's scope of work." Please clarify whether the modification of Protection & Control panels at remote end (Hetauda & Lapsiphedi) are in bidder scope. If the same to be included in present scope please include separate line item in respective BPS | Confirmed. The requirement is deemed included in the price bid. Furthermore, please note that the purpose of price schedules is to identify the Bid Price which will be used to determine progress payment. The Bidder shall quote the price under the Price Schedule required to carry out Work stated under Employer's Requirements (including technical specifications) based on the Conditions of Contract. |

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| 244. | New Ratmate Substation, 220913_Lot1_RAT_TS, Chapter-10, Section-2, clause 2.1, k<br>New Butwal Substation, 220913_Lot2_NBW_TS, Chapter-10, Section-2, clause 2.1,k | In referred clause, it is mentioned as "At remote end substations, add/modify the metering system to incorporate the feeders involved under this project. If the metering panels found insufficient to accommodate the metering requirements of the new feeders, then separate stand-alone panels shall be provided to meet the project requirements."<br>Please clarify whether the modification of metering system at remote end (Gorakhpur, Hetauda & Lapsiphedi) are in bidder scope. If the same to be included in present scope, please include separate line item in respective BPS | Confirmed. The requirement is deemed included in the price bid. Furthermore, please note that the purpose of price schedules is to identify the Bid Price which will be used to determine progress payment. The Bidder shall quote the price under the Price Schedule required to carry out Work stated under Employer's Requirements (including technical specifications) based on the Conditions of Contract. |
| 245. | New Ratmate Substation, 220913_Lot1_RAT_TS, Chapter-1, clause 11.4<br>New Butwal Substation, 220913_Lot2_NBW_TS, Chapter-1, clause 11.4<br>New Damauli Substation, 220913_Lot3_NDM_TS, Chapter-1, clause 11.4 | As per referred clause, the Bushing BIL is mentioned as 1550kV for 400kV voltage level. However the insulation level of the 420kV system is 1425KV as per specification, and the insulation level of the 420KV voltage level is 1425kV as per IEC-standard. Please clarify whether the insulation performance of the bushing shall be implemented in accordance with the IEC standard. | Kindly adhere to the requirement of the bidding document. |
| 246. | New Ratmate Substation, 220913_Lot1_RAT_TS, Chapter-3, clause 3.3,b<br>New Butwal Substation, 220913_Lot2_NBW_TS, Chapter-3, clause 3.3,b<br>New Damauli Substation, 220913_Lot3_NDM_TS, Chapter-3, clause 3.3,b | As per the referred clause it is mentioned as "All windings shall be furnished with insulation that will permit continuous operation at a winding rise of 55°C above ambient and a hotspot rise of 90°C above ambient without affecting the normal life expectancy of insulation."<br>The bidder presume as per IEC 60076-2, the temperature rise limits shall be measured & guaranteed over an yearly average temperature of 20 Deg. C. Please confirm. | Kindly adhere to the requirement of the bidding document and referred standards. |

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| 247. | New Ratmate Substation, 220913_Lot1_RAT_TS, Chapter-3, clause 3.3,b<br>New Butwal Substation, 220913_Lot2_NBW_TS, Chapter-3, clause 3.3,b<br>New Damauli Substation, 220913_Lot3_NDM_TS, Chapter-3, clause 3.3,b | As per the referred clause it is mentioned as "All windings shall be furnished with insulation that will permit continuous operation at a winding rise of 55°C above ambient and a hotspot rise of 90°C above ambient without affecting the normal life expectancy of insulation."<br>However, in specification clause 3.8 (ii) it is mentioned as " Winding temperature rise by resistance shall not exceed 65° C and hottest spot winding temperature rise shall not exceed 80° C for the full range of transformer operation."<br>As above points are contradictory please check & confirm the actual requirement. | MCA-Nepal may issue an addendum to correct the ambiguity in the Bidding Document after receiving approval from the authority as follow:<br><br>Winding temperature rise by resistance shall not exceed 55° C and hottest spot winding temperature rise shall not exceed 90° C for the full range of transformer operation. |
| 248. | New Ratmate Substation, 220913_Lot1_RAT_TS, Chapter-10, section-2, clause 3.3,a<br>New Butwal Substation, 220913_Lot2_NBW_TS, Chapter-11, section-2, clause 3.3,a<br>New Damauli Substation, 220913_Lot3_NDM_TS, Chapter-10, section-2, clause 3.3,a | In referred clause it is mentioned as "The fault recorder shall be integrated into the corresponding IEDs."<br>The bidder presume that Fault recorder shall be inbuilt function of BCU or numerical relays. Please confirm. | Kindly treat IED mentioned as protection IED which is to be treated as Protection Relay (Numerical in this context).<br><br>Further you may refer to clause 3.3 b as<br><br>"The fault recorder shall be provided for all transmission lines and comply with the following requirements. The recorder can be integrated into the line distance relay." |
| 249. | New Ratmate Substation, 220913_Lot1_RAT_TS, Chapter-17, clause 1.2, h<br>New Butwal Substation, 220913_Lot2_NBW_TS, Chapter-17, clause 1.2, h<br>New Damauli Substation, 220913_Lot3_NDM_TS, Chapter-18, clause 1.2, h | In referred clause, it is mentioned as "The maximum size of each grid of earthing mat shall not exceed 4X4 meters".<br><br>In this regard, the bidder request MCA to allow the Bidder to choose the maximum earth mat spacing, based on the Earthing design instead of 4m x 4m. Please check & confirm. | The Contractor is responsible for designing the earthing grid according to the standard IEEE-80, and to meet the requirements for step and touch potential and grid potential rise and earth resistance. The design and the associated calculations will be subject to approval by the Engineer. |

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| 250. | New Ratmate Substation, 220913_Lot1_RAT_TS, Chapter-17, clause 1.3, b<br>New Butwal Substation, 220913_Lot2_NBW_TS, Chapter-17, clause 1.3, b<br>New Damauli Substation, 220913_Lot3_NDM_TS, Chapter-18, clause 1.3, b | The material of earth electrodes shall be copper clad steel as per referred clause. However the same is mentioned as copper as per technical data sheet. Please check & confirm the actual requirement. | The Earth Electrode shall be of copper clad steel. MCA-Nepal may issue an addendum subject to the approval of authority. |
| 251. | New Ratmate Substation, 220913_Lot1_RAT_TS, Chapter-17, clause 6.1, b<br>New Butwal Substation, 220913_Lot2_NBW_TS, Chapter-17, clause 6.1, b<br>New Damauli Substation, 220913_Lot3_NDM_TS, Chapter-18, clause 6.1, b | In referred clause, it is mentioned as, "The entire control room building, firefighting pump house, and switchyard building lighting shall utilize LED based low power consumption luminaries to achieve desired lux level specified." However, Table 6 of lighting specification is listed with fluorescent type light fixtures. Please check & confirm the actual requirement. | The luminaries shall be of LED and should meet the minimum desired lux level as per the technical specifications. |
| 252. | Section IV Bid submission forms, Form TECH-11: Technical data schedule<br><br>Lot-1 Technical Data Schedule, Sl.No.16.1, 2.23 - 2.25, 2.29 - 2.31<br>Lot-2 Technical Data Schedule, Sl.No.9, 2.23 - 2.25, 2.29 - 2.31<br>Lot-3 Technical Data Schedule, Sl.No.16, 2.23 - 2.25, 2.29 - 2.31 | The TRV given in the referred clause of Technical data schedule of 420KV GIS is the value of | Kindly adhere to the requirement of the bidding document. |

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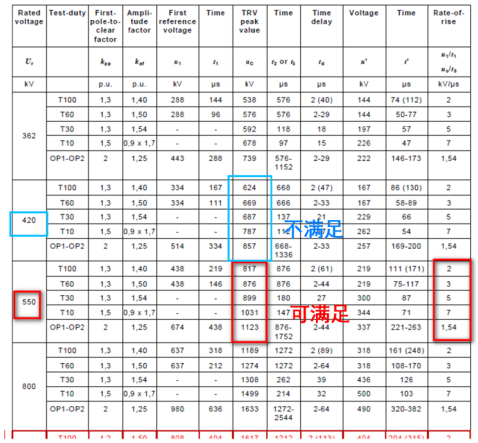
| | | 550KV GIS as specified in the IEC standard.<br>Table 26 (continued)<br>  <br>Please confirm whether bidder can follow as per IEC standard. | |
| 253. | Section IV Bid submission forms, Form TECH-11: Technical data schedule<br><br>Lot-1 Technical Data Schedule, Sl.No.16.1, 2.6<br>Lot-2 Technical Data Schedule, Sl.No.9, 2.6<br>Lot-3 Technical Data Schedule, Sl.No.16, 2.6 | As per referred clause, the rated lightning impulse withstand voltage (1.2 / 50 µs)(+bias) is mentioned as 1425(+457)KV for 420kV voltage level. However, The same shall be 1425 (+240) KV as per IEC 62271-203.<br><br>Please confirm whether bidder can follow as per IEC standard. | Confirmed. |
| 254. | 220913_B02_ GTR<br>clause 10.3 | From the referred clause, the bidder understands that STL requirement is only for GIS equipment. Please confirm. | The requirement of the STL will be as per the relevant technical specifications and chapters under the Bidding Document. |
| 255. | New Ratmate Substation, 220913_Lot1_RAT_TS, Chapter-17, clause 1.2,d | In the referred clause it is mentioned as "All lap, cross and tee connections between two earthing conductors shall be made by an approved thermo- | Approved Thermo-welding process is the preferred method. Compression Type connectors are acceptable too. |

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| | New Butwal Substation, 220913_Lot2_NBW_TS, Chapter-17, clause 1.2,d<br>New Damauli Substation, 220913_Lot3_NDM_TS, Chapter-18, clause 1.2,d | welding process or compression type connectors."<br><br>Please confirm whether the Earthing joints are to be made with Compression type connectors (or) through thermo-welding process? | |
| 256. | New Ratmate Substation, 220913_Lot1_RAT_TS, Chapter-17, clause 5<br>New Butwal Substation, 220913_Lot2_NBW_TS, Chapter-17, clause 5<br>New Damauli Substation, 220913_Lot3_NDM_TS, Chapter-18, clause 5 | The bidder understand as follows:<br>a) Both Cable trench & Duct banks are acceptable for outdoor LV power & control cable installation. Cable trench sections given in tender drawings are for reference purpose only. Please confirm.<br>b) Cabling in the control room shall be installed on ladder type cable trays for vertical runs while cabling in the switchyard area & within buildings shall be installed on angles in the trench. Please confirm.<br>c) EHV cables shall be installed directly in the duct by considering sufficient spacing between cables. Please confirm. | a) Confirmed.<br>b) Confirmed, subject to the approval of engineer during detailed engineering.<br>c) Confirmed, subject to the approval of engineer during detailed engineering. |
| 257. | Price schedule : 221031_Lot1_Rat_PS_Base Schedule No. 2.1.7 : Station Service Transformer, 630 kVA, 33/0.4kV | Specifications for Station Service Transformer, 630 kVA, 33/0.4kV are not available in tender documents. Please provide. | Please refer Clause 2 LT Transformer, under Chapter-4 LV Switchgear Specification of Part 2: Employer's Requirements Section V – B1 (Technical Specifications) for more clarification. |
| 258. | Autotransformer Specification & Data Sheets<br>*As per Technical Spec. Cl. no: 3.3 All windings shall be furnished with insulation that will permit continuous operation at a winding rise of 55°C above ambient and a* | Please confirm following parameters.<br><br>1) Top oil temperature rise.<br>2) Wining temperature rise.<br>3) Winding hotspot temperature rise. | MCA-Nepal may issue an addendum to correct the ambiguity in the Bidding Document after receiving approval from the authority as follow: Winding temperature rise by resistance shall not exceed 55° C and hottest spot winding |

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| | *hotspot rise of 90°C above ambient without affecting the normal life expectancy of insulation.*<br>*and*<br>*As per Cl. no: 3.8 (ii) Winding temperature rise by resistance shall not exceed 65° C and hottest spot winding temperature rise shall not exceed 80° C for the full range of transformer operation.*<br><br>*As per GTP format*<br>*Top oil measured by thermometer: 50 °C.*<br>*Winding measured by resistance method: 55 °C.* | | temperature rise shall not exceed 90° C for the full range of transformer operation. |
| 259. | Autotransformer Specification & Data Sheets<br>*As per Technical Specification Cl no: 3.14*<br>*9 Gas + H2O measurement required for DGA with IEC 61850 protocols over FO port.*<br><br>*While In GTP Cl no: 40, Gas Sensor called GE-HYDRAN M2 or equivalent with 3 Gas + H2O measurement required for DGA with Modbus or DNP 3.0 protocol over RS-485* | Both requirements are different and cost for the same is also different. As per Technical Spec. GE-Transfix model is suitable while as per GTP GE-Hydran M2 model is suitable.<br><br>Please confirm the requirement | Kindly adhere to the requirement stated in Clause 3.14 of Chapter 3 Auto Transformer of Technical Specification (TS) volume. The ambiguity in the bidding document in the Technical Data Sheet will be corrected through issuing an Addendum to the Bidding Document, after receiving approval from authority. |

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| 260. | Autotransformer Specification & Data Sheets<br>*167 MVA 1-Phase ICT.*<br>*As per Cl no: 2.1 (g)ii. Noise level shall be as per NEMA TR-1 Standard. & as per GTP Cl no: 12.4.3 Noise Level shall be 80 dB(A).* | As per NEMA TR-1 Standard, 167 MVA for 1300 BIL above for OFAF cooling 87 dB(A) noise level acceptable. Please confirm the same Noise level. | Kindly adhere to the requirement of the bidding document. . |
| 261. | Autotransformer Specification & Data Sheets<br>*315 MVA 3-Phase ICT.*<br>*As per Cl no: 2.1 (g)ii. Noise level shall be as per NEMA TR-1 Standard. & as per GTP Cl no: 12.4.3 Noise Level shall be 80 dB(A).* | As per NEMA TR-1 Standard, 167 MVA for 1300 BIL above for OFAF cooling 90 dB(A) noise level acceptable. Please confirm the same Noise level. | Kindly adhere to the requirement of the bidding document. |
| 262. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 1.1 f<br>*f. The Contractor shall ship the autotransformer filled with oil or in an atmosphere of nitrogen or dry air to prevent the ingress of moisture during transportation. In the former case the contractor shall comply with the weight limitation on transport to the site and handling facilities at the substation* | Is their any Transformer overall Dimension limitations & Transport Dimensions or transport weight limitations ? If yes please specify | Please refer response to clarification for S.N. 205 |

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| 263. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 2.3.1 *LOSS CAPITALIZATION* | The bidder understands losses shall be offered as per capitalization rates given in this clause. If transformer to be designed with any fixed maximum losses, please define. | Please refer response to clarification for S.N. 206 |
| 264. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 3.1 a.iv *iv. The auto transformers shall be of the bell type tank* | The bidder proposes to offer this transformer with conventional type of tank with bolted top cover due to the following reasons:<br>a) Any inspection at site can be easily carried out by removing top cover and inspection covers.<br>b) If we supply with bell tank design, the gasket joint which is at tank bottom side will continuously see excessive oil pressure head and there will be more chances of oil leakage. Due to this reason many customers prefer conventional tanks even for higher ratings.<br>In view of the above the bidder request us to kindly accept the tank with conventional, bolted top cover construction. | Please refer response to clarification for S.N. 207. |
| 265. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 3.3 f *f. The winding resistance shall not vary from phase to phase by more than 1%* | Winding resistance variance between phases depend on various factor like tolerance on conductor dimension effecting area, tolerance on proof stress effecting conductivity, and cable length for vector connection and surface contact at lug/various connections. So, variation of 1% is not possible. It will be as per measurement at actuals without effecting principal guaranteed parameters like losses. Please confirm | Please refer response to clarification for S.N. 145. |

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| 266. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 5.2 note C. i *i. Bushing (Type Test per IEC 60137, including snap back/seismic test)* | The bidder understands that, this is requirement for 400kV and above OIP bushings only. Please confirm | Please refer response to clarification for S.N. 215 |
| 267. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION & Bidding Document Technical Data Sheet Auto Transformer Technical Data Sheet Cl. 5.2 note C. v & Technical Data Sheet Sl.No. *Cl. 5.2 C v. Check for mis-operation of the Buchholz relay due to simultaneous operation of oil pumps.* & *Technical Data Sheet Sl.No.6 : Cooling: ONAN / ONAF / OFAF* 6 | Considering following disadvantages while using oil pumps,<br>1. Oil pumps often require a separate foundation for supporting pump and attached large pipe network from ground.<br>2. Oil pumps need continual maintenance during operation as for any rotary equipment. Since hot oil is continuously circulated through it, frequent monitoring is required for any oil leakage.<br>3. Oil pumps consume more auxiliary power in comparison to corresponding consumption by extra cooling fans required in the event of eliminating oil pump.<br>4. In case of a gasket leak during service, air can be sucked through pipe joints in the suction side of pumps which gets mixed up with circulating oil and can be an entry point for moisture into transformer. Several gasket joints in pipe network result in many such moisture entry points.<br>5. In case of shifting of transformer from one location to another location, pumps and its pipe network require proper handling and care.<br>6. We have supplied upto 500MVA 400kV with ONAN/ONAF1/ONAF2 cooling to various | Please refer response to clarification for S.N. 216 |

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| | | utilities in India. Customer to kindly review and accept the same. Note that mis-operation of buchholz relay is not applicable in case of proposed ONAN/ONAF1/ONAF2 cooling. | |
| 268. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 5.2 note C. viii *Cl. 5.2 C viii. The pressure relief device of each size shall be subjected to increase in oil pressure. It shall operate before reaching the test pressure specified in the autotransformer tank pressure test above.* | PRD operation check will be done by air separately without mounting on Transformer. | Please refer response to clarification for S.N. 217. |
| 269. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO-TRANSFORMER SPECIFICATION Cl. 6 *6. SPARE PARTS AND MAINTENANCE EQUIPMENT table 8* | Only spares mentioned in table 8 considered. No other special tools & tackles are recommended hence not considered. Pls confirm | Please refer response to clarification for S.N. 219 |
| 270. | 220913_Lot1_RAT_TS, 220913_Lot2_NBW_TS, 220913_Lot3_NDM_TS CHAPTER 3: AUTO- | Transformer is in-line to technical specification Chapter 3: Autotransformer Specification. The bidder understand that all other chapters of this specification are not applicable specific to transformers and are not in our scope of supply. | Please refer response to clarification for S.N. 220 |

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| | TRANSFORMER SPECIFICATION *General* | | |
| 271. | Bidding Document Technical Data Sheet<br>Auto Transformer Technical Data Sheet Technical Data Sheet Sl.No.17.2<br>*17.2 - changer shall be located on the HV side of the series winding for achieving ± 10% using 17 (8 plus, 8 minus, nominal) steps of 1.25%. It shall be of constant flux voltage variation type as per Cl.3.2 of IS:2026 Part- IV-1977* | The bidder understands that, tap changer is required for HV variation and is located at common end of series winding to achieve constant ohmic impedance requirement. Please confirm. | Please refer response to clarification for S.N. 221 |
| 272. | Bidding Document<br>*General* | The bidder understands that, in this document only techical data sheets of AUTOTRANSFORMER SPECIFICATION is applicable and no other specifications of this document are applicable to transformers and hence not considered in our scope of supply.. | Please refer response to clarification for S.N. 223 |
| 273. | 221123_Lot1_RAT_PSR, 221123_Lot2_NBW_PSR, 221123_Lot3_NDM_PSR<br>*Seismic Condition*<br>*Seismic Acceleration*<br>*(PGA: peak ground acceleration) 0.50 g* | Please confirm seismic acceleration value. Mentioned acceleration is high. We propose to offer RIP bushing due to high seismic acceleration. | Please refer response to clarification for S.N. 224 |
| 274. | Part 2: Employer's Requirements Section V – B0 (General Technical Requirement) Cl. 10 | For Power/ Auto Transformers, please confirm if type tests reports of similar or higher rating transformer are acceptable. | Please refer response to clarification for S.N. 225 |

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| | *TYPE TESTING, INSPECTION, TESTING & INSPECTION CERTIFICATE* | | |
| 275. | Autotransformer Specification & Data Sheets<br>*Short Circuit (S.C) withstand* | The bidder do not envisage any S.C test for the transformer. Also, we do not envisage any SC similarity as per IEC 60076 Part -5. Please confirm whether we can submit S.C withstand calculations in the event of order to demonstrate S.C capability of the transformer. | Please refer response to clarification for S.N. 153 |
| 276. | Autotransformer Specification & Data Sheets<br>*Radiator* | The bidders are offering radiators with 1.0mm standard thickness with paint as per standard practice. Please confirm the conformity | Please refer response to clarification for S.N. 227 |
| 277. | Autotransformer Specification & Data Sheets<br>*Type test* | The bidder do not envisage repetition of type test for transformer accessories. Type test report available for transformer accessories shall be submitted for reference purpose without any limitation on validity. Please confirm | Please refer response to clarification for S.N. 228 |
| 278. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 4 of 52 - 1.1 c), 1.1 d) & 1.1 f)<br>*c. This scope of works includes the interfacing and extension of the existing telecommunication systems of*<br>*i. Lapsiphedi Substation*<br>*ii. New Hetauda Substation*<br>*d) The Contractor will be responsible to supply and install interface cards of SDH multiplexer plus phone sets in Lapsiphedi and New Hetauda for remote* | The bidder understand scope of work involves supply of new SDH and Multiplexer equipment at Ratmate GIS S/S and augmentation of existing SDH equipment at Lapsiphedi & New Hetauda. In view of the same, please provide following:<br>a) Make & Model of existing SDH cum Muliplexer equipment at Lapsiphedi & New hetauda<br>b) STM level (STM-1/4/16)<br>c) Slot/optical & Electrical interface cards/ports availability for proposed integration with new SDH at Ratamate GIS S/S in MCA.NEA scope.<br>d) Please confirm modification of configuration in existing SDH Equipments at New Hetauda & Lapsiphedi wil be done by Purchaser. | The contractor shall make sufficient provision to interface the existing SDH equipment. After award, MCA-Nepal will do the necessary coordination with the successful contractor to retrieve the details.<br>a. STM 16 upgradable to 64 as per the requirements<br>b. It is the responsibility of the contractor.<br>c. It is the responsibility of the contractor.<br>d. Refer to the requirements with interfacing at existing New Hetauda & Lapsiphedi SDH |

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| | *extensions, interface cards of SDH multiplexer and EPABX at LDC, ECC, New Dhalkebar and New Hetauda.*<br>*g) New SDH FO communication links, with associated terminal equipment, are required at 400 kV substations in Hetauda, Lapshiphedi and New Damauli to integrate the existing communication network to the new 400 kV substations.* | e) Please confirm new SDH Equipments can be proposed at New Hetauda & Lapsiphedi in-lieu of integration/interfacing requirement of new proposed SDH equipment at Ratamate S/S with existing SDH equipments at New hetauda & Lapsiphedi S/s . Please confirm | equipment and new SDH equipment at Ratmate.<br>e. This will be finalized during detailed Engineering subject to approval by the Engineer. |
| 279. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 4 of 52 - 1.1 g).iv)<br>*iv. The fiber optic communication used for protection purpose between the Relays at the two ends of the circuit shall be as per the requirement.* | 1. Please confirm requirement under this project is Digital Protection Coupler is for Distance Protection only & no differential Protection interface are to be proposed with offered D&I Mux equipment.<br>2. Please confirm DPC qty & same is to be offered distance protection for following lines:<br>Ratamate- New Hetauda 400kV D/C - 8 Nos. (4 at each end)<br>Ratamate- Lapsiphedi 400kV D/C - 8 Nos. (4 at each end).<br>3. Please provide specifiation of Digital protection coupler. Whetehr NEA specification of DPC i.e 4 commmand , E1 , 48 V DC operated , COmamdn voltage upto 220VDC to be followed or additional IEC61850 ed.2 goose messaging support to be available in offered DIgital Protection coupler equipment. Please confirm. | 1. Confirmed.<br>2. Confirmed<br>3. The Contractor is responsible to provide a complete and functional solution consistent with protection schemes and meet NEA requirements for purpose of compatibility. |

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| 280. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 5 of 52 - 1.1 i) *i. Digital type measuring equipment shall comply with ITU-T (CCITT) Recommendation O.151* | Please confirm whether Digital Type Measuring equipments are to be supplied. If yes provide detailed specification & quantities of Measuring equipment so that all bidders will be on same platform. | Bidders to propose measuring and testing equipment compliant with the requirements. Refer to the Price Schedule. |
| 281. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 6 of 52 - 1.2. i) *i. Testing tools for STM1,4, 16& 64 shall be supplied.* | Please confirm whether Testing Tools for STM-1,4, 16 & 64 are to be supplied. If yes provide detailed specification & quantities of Measuring equipment so that all bidders will be on same platform. | Bidders to propose metering and testing equipment. Refer to the Price Schedule. |
| 282. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 7 of 52 - 2. c) *c. Contractor to provide new RFTU to integrate to existing NEA EXFO NQMSFiber Remote Fiber Testing System. The new RFTS requirement shall be equal with existing RFTUM.* | Please confirm requirement of new RFTU for integration to existing NEA EXFO Fiber Remote Fiber Testing System. Whether supply of the same in scope or not ? Please provide detailed specification & quantity for this requirement. | To be coordinated by the Engineer at the Contract design stage to ensure compatibility with NEA network equipment. |
| 283. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 7 of 52 - 2.1.b to e) *b. The SDH node shall be used for interconnection of terminal Substation to thefibre optic network and shall be based on the Synchronous Digital Hierarchy(SDH) having bit rate of STM-4/16 as specified in price schedule.* | 1. Requirement of SDH Equipment not clear , please confirm whetehr SDH Equipment requirement is for STM-1/4/16 2. Upgradability to STM-64 is not understood nas NEA requirement currently is for STM-4/16 or MPLS-TP 1G/10G interfaces (~STM-64). In case offered equipment chassis supports MPLS-TP 1G or 10 G (equivalent to STM-64) & same can be upfgraded in fiuture with MPLS-TP interface cards, will it be acceptable to MCA. Please confirm | 1. As per Section V, B1.2, CHAPTER 12: TELECOMMUNICATIONS SPECIFICATION, new generation SDH STM -16 (Upgradable to STM-64) needs to be proposed as per the Employer's Requirement.<br>2. To be coordinated by the Engineer at the Contract design stage to ensure compatibility with NEA network equipment. |

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| | *c. New Generation SDH STM-16 (Upgradeable to STM-64) Add/DropMultiplexers (ADM)/ Equipment shall be provided and installed byCONTRACTOR at all sites to establish the fiber optics links specified in theSOW/TS. Specific system requirement of the New Generation SDH STM-16 Add/Drop Multiplexer equipment.*<br>*d. CONTRACTOR shall provide and install STM-16 Optical Interfacecards/modules with single STM-16 TX and RX optical ports in eachcard/module.*<br>*e. The SDH node will be upgradeable to STM-64.* | 3. SDH Technology is getting obsolete & only few selected manufacturers in Power Utility domain manufactures SDH equipments which supports STM-64 upgradability. Most of Utilities including NEA are transitioning for existing SDH installed base to MPLS-TP. Hence the bidder request MCA to either limit the requirement to STM-1/4/16 which is used in NEA network in existing & ongoing requirements or in case much more capacity requirement please consider Hybrid MPLS-TP equipment which supports MPLS-TP/SDH/PDH with 1 G or 10G interfaces additionally it can provide STM-1/4/16 interfaces for interfacing with existing SDH equipment. | 3. To be coordinated by the Engineer at the Contract design stage to ensure compatibility with NEA network equipment. |
| 284. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 8 of 52 - 2.1.j)<br>*j. Provide, install, test and commission (13 Nos.) thirteen sets of data/voice Multiplexer (Drop/Insert Operation). The Data/Voice Multiplexer equipment design shall be provided with 2 x 2.048Mbit/s aggregate ports, redundant power supply cards and redundant cross connect matrix cards (and/or E1 cards). Analog Voice and Data Interface cards shall be provided.* | Requirement is not clear. Is it requirement of 13 Nos. D&I Mux at Ratamate S/S or same is mentioned by mistake. Please provide detailed requirement for this point or else delete this clause. | It should be cards with 16 E1 channels as specified in the Technical Data Schedules. |

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| 285. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 9 of 52 - 2.1 q) *The offered transmission equipment (SDH node) shall support an optical link of at least 375 km for STM-4 and 400 km for STM-16 without any repeater station in between. If required, a wavelength translator/optical amplifier shall be provided by the contractor.* | Please confirm type of optical interfaces proposed under this project for optical links to be proposed under this project i.e. STM-4 or STM-16. | As per Section V, B1.2, Chapter 12: Telecommunications Specification, new generation SDH STM -16 (Upgradable to STM-64) needs to be proposed as per the Employer's Requirement. |
| 286. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 9 of 52 - 2.2.b) & c) *b. SDH node will be STM-16 with five (5) MSP protected directions. c. Two (2) STM-16 (2.5Gbps) Aggregate optical fiber Interface cards operating in 1+1 protected configuration (4Fiber 1+1 MSP) directions towards remote substations each.* | 1. The bidder understands equipment to be proposed is STM-16,5 MSP & only 2 directions out of 5 protected directions should be equipped. Please confirm our understanding. 2. SDH Technology is getting obsolete & only few selected manufacturers in Power Utility domain manufactures SDH equipments. Most of Utilities including NEA are transitioning for existing SDH installed base to MPLS-TP. Please change requirement to MPLS-TP Hybrid 1G , 5 Protected directions. 3. In case bidder offers equivalent MPLS-TP 1G 5 Protected directions will it be acceptable. Please confirm. | 1. Confirmed<br>2. To be coordinated by the Engineer at the Contract design stage to ensure compatibility with NEA network equipment.<br>3. To be coordinated by the Engineer at the Contract design stage to ensure compatibility with NEA network equipment. |
| 287. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 10 of 52 11 of 52 - 2.2.i) 2.2.1 *The New Generation SDH STM-16/4/1/2M Add/Drop Multiplexer* | 1. Please confirm whether new NMS to be supplied for monitoring of offered NG-SDH Equipment at Ratamate S/S or bidder has to supply only 03 Nos. LCT terminals loaded with craft terminal software for miantenance , configuration & provisioning. 2. Please confirm Laptops should be workstation | 1. Supply shall be as specified in 2.2 j and 2.2.1<br>2. Workstation to be laptop based.<br>3. Refer to #1 above |

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| | *equipment shall fully operate with the existing and/or new Telecommunication Network Management Systems.*<br>*i.The craft terminal for telecommunications equipment will be part of the engineering workstations.*<br>*iv. Provide THREE (3) Local Craft Terminals (loaded with original OperatingSystem and Application software) with interface converters and completeaccessories (battery pack, Power supply, carrying bag & optical mouse) to carry-out all local maintenance, Configuration, provisioning and alarm*<br>*v. Provisioning will be in the Local Craft Terminal for integration with a fullNMS server* | based & no laptop to be provided for this requirement.<br>3. In case only Craft terminals to be offered then requirement of integration with full NMS server is not understood. If OEM didn't have existing NMS in NEA/MCA network how to integrate craft terminal as existing NMS is proprietary in nature. | |
| 288. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 15 of 52 - 3.4 3.5.ii)<br>*The Contractor shall provide rack/wall mounted Fibre Optic Distribution Panels (FODPs) sized as indicated in the appendices and shall terminate the fibre optic cabling up to the FODPs.*<br>*ii. All FODPs will use the same connectors that existing FODPs* | Please confirm whether 24 F or 48F Fiber Rackmounted /Wall Mounted fiber FODP to be proposed at Ratamate GIS S/S .<br>Please confirm whether existing FODP's at Lapsiphedi & New Hetauda (existing FO Approach Cable are already terminated) can be used for new link i.e New Hetauda to Ratamate & Ratamate to Lapsiphedi or new FODP's are to be supplied at Ratamate, New hetauda & Lapsiphedi S/S's | 1. 48F FODP<br>2. Contractor to supply new FODP at Lapsiphedi and New Hetauda |

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| | *use at*<br>*Hetauda, Lapsiphedi and New Damauli. If information is not available SC connectors are preferred.* | | |
| 289. | Part 2: Employer's Requirements Section V B1 (Technical Specifications)<br>220913_B02_ GTR20 of 52<br>17 of 53, 11 of 68 - 10 10.3 1.3<br>*c. All Telecom equipment with all types of cards being supplied will conform to Type Tests as per Sections 10.1 to 10.5. The test reports submitted will be of the tests conducted within the last five (5) years.*<br>*d. In case the test reports are older than five (5) years, the Contractor will repeat these tests at no extra cost to the Employer.*<br>*10.3 The test reports submitted shall be of the tests conducted within the last 10 (ten) years before the originally scheduled date of bid opening.*<br>*1.3 Only type tested equipment shall be used. Type test reports of similar equipment - in terms of mechanical and electrical size/measures, mechanical and electrical technical data, similar model type, and not older than 10* | Please confirm requirement of Type tests for Telecom is 10 years of 5 Years as both Technical specifications, PSR & GTR requirement are conflicting. | 5 Years for telecommunication equipment. MCA-Nepal may issue an addendum to this requirement, subject to the approval of authority. |

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| | *years at bid opening, shall be accepted. Type Test Reports shall be subject to the Engineer's approval. If no type test certificates are available, the relevant type tests shall be performed at the Contractor's expenses.* | | |
| 290. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 33 of 52 - 10.8<br>*v. Testing Tools*<br>*a. All testing kits for STM1, 4 16 & 64 shall be supplied*<br>*b. Testing kits for VC12 and VC4 shall be supplied*<br>*c. Ethernet testing tools shall be supplied.*<br>*d. OTDR and power & Sources shall be supplied.* | Please confirm whether Testing Tools are to be supplied. If yes provide detailed specification & quantities of Testing tools so that all bidders will be on same platform. | Bidders to propose metering and testing equipment. Refer to the Price Schedule. |
| 291. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 38 of 52 – 1<br>*The present section outlines the Technical Requirements applicable for the design, supply, installation and commissioning of VoIP private branch exchanges (EPABX) to be installed in Ratmate and associated telephone equipment for a complete operational private telephone system to be installed in related* | Please provide configuration of offered EPABX system at RATAMATE S/S as details mnot provided TS/Techhnical datasheet i.e<br>1. no. Analog/ Digital Subscribers,<br>2. no. of IP Susbcribers,<br>3. No. of E1 Interface,<br>4. No. of E&M Interface<br>5. CO Lines<br>6. Power Supply & Control Card Redundnacy required or not<br>7. Operater Console PC Based or Phone based<br>8. Analog Subscriber qty & specification<br>9. DIgital Subscriber phone qty & specification | 1 to 5- Refer to the corresponding technical data schedule.<br>6- Required<br>7- Phone based<br>8 – Analog phone in substation main control room<br>9 – Digital phone in each room of control building and GIS building<br>10- Attendant phone in substation main control room<br>11- Outdoor phone in three strategic locations of the substation<br>12- Same as #9 |

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| | *substations as an extension of the existing NEA phone system. These technical requirements shall always be read in conjunction with the "General Technical requirements" in B.02 and Technical Data sheets in Vol.2* | 10. Attendant Phones qty & specification<br>11. Outdoor Telephone Sets quantity & Specification<br>12. IP Phone Qty & specification (SIP based or open SIP) | |
| 292. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 39 of 52 - 2.e) *e. The EPABX shall be supplied to provide for the initial requirements as specified in the Technical Data Schedules and 100% spare capacity. It shall also be designed for future expansion (ultimate capacity) equivalent to at least 100 % of the installed capacity. The EPABX shall be flexible and allow for easy growth* | The bidder understands EPABX to be supplied wired with required interfaces & it should have 200% spare capacity for future. Please confirm | Confirmed. |
| 293. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 40 of 52 - 2.i) *i. The EPABX will be supplied along with one attendant console and provision for operation with various attendant consoles including their cabling accessories to allow connection to the MDF* | Please provide attendant console requirement & expandability requirement for attendant consoles. | Bidder to propose attendant console to be suitable and meet requirements of clause 2.5.4 |
| 294. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 40 of 52 - 2.h) | 5 Meter 10 PAIR Jelly filled Telephone cable to be supplied with EPABX for Analog Subscriber/Remote Subscribers. | Bidder to propose a fully functional turnkey installation not limited to 5m. |

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| | *h. Multiconductor interconnection cables (5 meters length minimum) will be fitted at one end to the EPABX by means of a plug-in connector and at the other end to the wall-mounted Main Distribution Frame (MDF) terminals. All PBX circuits shall be terminated to the MDF. All external cables in the EPABX enclosure shall enter through the bottom plate.* | | |
| 295. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 40 of 52 - 2.k)<br>*k. The EPABX at Ratmate should be linked (Via SDH fiber optic network) with the other EPABX (installed in other NEA substation) by means of digital trunks (such as E1(2048 kb/s) of 30 voice channels) with (Refer to diagram in #8 Figure):*<br>*i. Hetauda ECC passing through New Hetauda substation directly to Hetauda*<br>*ii. LDC passing through Lapsiphedi-Bahrabishe-New Khimti Lamosangu-Bhaktapur to ECC*<br>*iii.New Dhalkebar PBX passing through Lapsiphedi-Bahrabishe-New Khimti* | Please confirm E1/E&M /FXS interfaces for Remote subscriber & existing EPABX integration will be provided by MCA/NEA. Existing EPABX configuration for integration will be in scope of MCA/NEA. Please confirm. | The entire requirement to fulfill the tasks will be in the scope of the contractor. |

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| | *iv. New Hetauda PBX*<br>*v. The EPABX at Ratmate will be linked to other EPABX of NEA network by means of 4W E/M trunks as defined during initial design.* | | |
| 296. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 46 of 52 –<br>*h. The number of telephone sets to be installed is as follow:*<br>*i. One digital IP based Attendant console (Ratmate)*<br>*ii. Two digital IP based Operators phone in each substation control room (Ratmate, New Hetaudi and New Butwal)*<br>*iii. One digital IP based phone set for each office, each equipment room,*<br>*conference room and guard room of each substation*<br>*iv. Two digital IP based phone sets located conveniently in each of Lapsiphedi*<br>*and New Hetauda substation control building*<br>*v. Three digital IP based phone in each GIS hall of each substation*<br>*vi. 10 Outdoor phone sets located strategically in the switchyard near maneuvering points and* | Telephone Cabling in existing S/S's in New Hetaudi and New Butwal & at Ratamate office, equipment room , guard room , control buiding, switchyard room will be in scope of MCA/NEA. Please confirm | The entire requirement to fulfill the tasks will be in the scope of the contractor. |

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| | *power transformers of each substation* | | |
| 297. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 4 of 49 - 1.1 b), 1.1 d) & 1.1 e)<br><br>*b. The sites included in this specification are the following:*<br>*i. 400 kV New Butwal GIS Substation*<br>*d. The Contractor will be responsible for supply and installation of Interface cards of SDH multiplexer plus phone sets and coordinate with Ratmate Contractor through MCA-Nepal.*<br>*e. The Gorakhpur Substation to be connected with 400kV New Butwal Gorakhpur transmission line may adopt Digital Protection Coupler (DPC). The Digital Protection Coupler matching with the Gorakhpur S/S and associated power & control cables, fibre cables and accessories for New Butwal S/S is under the present scope of work and shall be used for tele protection application.*<br>*f. New SDH FO communication* | The bidder understands scope of work involves supply of new SDH and Multiplexer equipment at New Butawal GIS S/S and augmentation of existing SDH equipment at Indian Border Gorakhpur & New Damauli. In view of the same, please provide following:<br>a) Make & Model of existing SDH cum Muliplexer equipment at Gorakhpur, India & New Damauli<br>b) STM level (STM-1/4/16)<br>c) Slot/optical & Electrical interface cards/ports availability for proposed integration with new SDH at New Butawal GIS S/S in MCA/NEA scope.<br>d) Please confirm modification of configuration in existing SDH Equipments at Gorakhpur & New Damaulii wil be done by Purchaser.<br>e) Please confirm new SDH Equipments can be proposed at Gorakhpur & New Damauli in-lieu of integration/interfacing requirement of new proposed SDH equipment at New Butawal S/S with existing SDH equipments at Gorakhpur & New Damauli S/s . Please confirm<br>f) Requirement of supply & installation of SDH interface cards at Ratamate S/S is mentione dby mistake & there is no integration requirement with RATAMATE S/S of proposed SDH equipment at New Butawal. | a) & b) To be coordinated by the Engineer at the Contract design stage to ensure compatibility with NEA network equipment<br>c) & d) Interface cards and modifications within Contractor's scope of works<br>e) To be coordinated by the Engineer at the Contract design stage to ensure compatibility with NEA and Indian network equipment.<br>f) Bidders may please review Figure-1 under CHAPTER-13 for better understanding. |

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| | *links, with associated terminal equipment, are required at 400 kV substations in New Damauli and New India Border to integrate the existing communication network to the new 400 kV substations.* | | |
| 298. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 221123_Lot2_NBW_PSR4 of 49 13 of 64 - 1.1 g).iv) 2.1.1. *c. iv. The fiber optic communication used for protection purpose between the Relays at the two ends of the circuit shall be as per the requirement. e. The Gorakhpur Substation to be connected with 400kV New Butwal Gorakhpur transmission line may adopt Digital Protection Coupler (DPC). The Digital Protection Coupler matching with the Gorakhpur S/S and* a *associated power & control cables, fibre cables and accessories for New Butwal S/S is under the present scope of work and shall be used for tele protection application. Each DPC shall be interfaced with SDH/MUX telecommunication* | 1. Please confirm requirement under this project is Digital Protection Coupler is for Distance Protection only & no differential Protection interface are to be proposed with offered D&I Mux equipment.<br>2. Please confirm DPC qty & same is to be offered distance protection for following lines: New Butawal- New Damauli 400kV D/C - 8 Nos. (4 at each end, 4 Nos. for New Damauli will be considered in LOT-3) New Butawal- Gorakhpur 400kV D/C - 4 Nos. (2 at each end). Analog Protection Coupler through PLCC New Butawal- Gorakhpur 400kV D/C - 4 Nos. (2 at each end)<br>3. Please confirm proposed DPC & existing SDH at Gorakhpur S/S are located in control room & same is not kiosk based & DPC panel situated within distance of 40 meter & there is no requirement of E1-FO COnverter for E1 extension for DPC to SDH interfacing. | 1. Confirmed.<br>2. Confirmed<br>3. Contractor is responsible to provide a complete and functional solution consistent with protection schemes and meet NEA and Indian Utility requirements for purpose of compatibility. |

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| | *terminal located in the control room required for the communication with present SAS and SCADA system of NEA. 2.1.1.I.a PLCC system along with necessary coupling equipment, line traps and cables need to be installed in each of 400kV D/C Lines going towards Indo-Nepal border to extend to Gorakhpur Substation in UP of India are also included in the scope.* | | |
| 299. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 5 of 49 - 1.1 i) *i. Digital type measuring equipment shall comply with ITU-T (CCITT) Recommendation O.151.* | Please confirm whether Digital Type Measuring equipments are to be supplied. If yes provide detailed specification & quantities of Measuring equipment so that all bidders will be on same platform. | Please refer response to clarification for S.N. 280 |
| 300. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 6 of 49 - 1.2. i) *i. Testing tools for STM1,4, 16& 64 shall be supplied.* | Please confirm whether Testing Tools for STM-1, 4, 16 & 64 are to be supplied. If yes provide detailed specification & quantities of Measuring equipment so that all bidders will be on same platform. | Please refer response to clarification for S.N. 281 |
| 301. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 7 of 49 - 2. c) *c. Contractor to provide new RFTU to integrate to existing NEA EXFO NQMSFiber Remote Fiber Testing System. The new RFTS* | Please confirm requirement of new RFTU for integration to existing NEA EXFO Fiber Remote Fiber Testing System. Whether supply of the same in scope or not? Please provide detailed specification & quantity for this requirement. | Please refer response to clarification for S.N. 282 |

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| | *requirement shall be equal with existing RFTUM.* | | |
| 302. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 7 of 49 - 2.1.b to e)<br>*b. The SDH node shall be used for interconnection of terminal Substation to thefibre optic network and shall be based on the Synchronous Digital Hierarchy(SDH) having bit rate of STM-4/16 as specified in price schedule.*<br>*c. New Generation SDH STM-16 (Upgradeable to STM-64) Add/Drop Multiplexers (ADM)/ Equipment shall be provided and installed by CONTRACTOR at all sites to establish the fiber optics links specified in the SOW/TS. Specific system requirement of the New Generation SDH STM-16 Add/Drop Multiplexer equipment.*<br>*d. CONTRACTOR shall provide and install STM-16 Optical Interfacecards/modules with single STM-16 TX and RX optical ports in eachcard/module.*<br>*e. The SDH node will be upgradeable to STM-64.* | 1. Requirement of SDH Equipment not clear, please confirm whetehr SDH Equipment requirement is for STM-1/4/16<br>2. Upgradability to STM-64 is not understood nas NEA requirement currently is for STM-4/16 or MPLS-TP 1G/10G interfaces (~STM-64). In case offered equipment chassis supports MPLS-TP 1G or 10 G (equivalent to STM-64) & same can be upfgraded in fiuture with MPLS-TP interface cards, will it be acceptable to MCA. Please confirm<br>3. SDH Technology is getting obsolete & only few selected manufacturers in Power Utility domain manufactures SDH equipments which supports STM-64 upgradability. Most of Utilities including NEA are transitioning for existing SDH installed base to MPLS-TP. Hence bidder request MCA to either limit the requirement to STM-1/4/16 which is used in NEA network in existing & ongoing requirements or in case much more capacity requirement please consider Hybrid MPLS-TP equipment which supports MPLS-TP/SDH/PDH with 1 G or 10G interfaces additionally it can provide STM-1/4/16 interfaces for interfacing with existing SDH equipment. | Please refer response to clarification for S.N. 283. |

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| 303. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 8 of 52 - 2.1.j) *j. Provide, install, test and commission (13 Nos.) thirteen sets of data/voice Multiplexer (Drop/Insert Operation). The Data/Voice Multiplexer equipment design shall be provided with 2 x 2.048Mbit/s aggregate ports, redundant power supply cards and redundant cross connect matrix cards (and/or E1 cards). Analog Voice and Data Interface cards shall be provided.* | Requirement is not clear. Is it requirement of 13 Nos. D&I Mux at Ratamate S/S or same is mentioned by mistake. Please provide detailed requirement for this point or else delete this clause. | Please refer response to clarification for S.N. 284 |
| 304. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 9 of 49 - 2.1 q) *The offered transmission equipment (SDH node) shall support an optical link of at least 375 km for STM-4 and 400 km for STM-16 without any repeater station in between. If required, a wavelength translator/optical amplifier shall be provided by the contractor.* | Please confirm the type of optical interfaces proposed unde rthis project for optical links to be proposed under this project i.e STM-4 or STM-16. | Please refer response to clarification for S.N. 285 |
| 305. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 9 of 49 - 2.2.b) & c) *b. SDH node will be STM-16 with five (5) MSP protected directions.* | 1. The bidder understands equipment to be proposed is STM-16,5 MSP & only 2 directions out of 5 protected directions should be equipped. Please confirm our understanding. 2. SDH Technology is getting obsolete & only few selected manufacturers in Power Utility | Please refer response to clarification for S.N. 286 |

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| | *c. Two (2) STM-16 (2.5Gbps) Aggregate optical fiber Interface cards operating in 1+1 protected configuration (4Fiber 1+1 MSP) directions towards remote substations each.* | domain manufactures SDH equipments. Most of Utilities including NEA are transitioning for existing SDH installed base to MPLS-TP. Please change requirement to MPLS-TP Hybrid 1G , 5 Protected directions.<br>3. In case bidder offers equivalent MPLS-TP 1G 5 Protected directions will it be acceptable. Please confirm. | |
| 306. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 10 of 49<br>11 of 49 - 2.2.i) 2.2.1<br>*The New Generation SDH STM-16/4/1/2M Add/Drop Multiplexer equipment shall fully operate with the existing and/or new Telecommunication Network Management Systems.*<br>*i.The craft terminal for telecommunications equipment will be part of the engineering workstations.*<br>*iv. Provide THREE (3) Local Craft Terminals (loaded with original OperatingSystem and Application software) with interface converters and completeaccessories (battery pack, Power supply, carrying bag & optical mouse) to carry-out all local maintenance, Configuration, provisioning and alarm*<br>*v. Provisioning will be in the* | 1. Please confirm whether new NMS to be supplied for monitoring of offered NG-SDH Equipment at Ratamate S/S or bidder has to supply only 03 Nos. LCT terminals loaded with craft terminal software for maintenance , configuration & provisioning.<br>2. Please confirm Laptops should be workstation based & no laptop to be provided for this requirement.<br>3. In case only Craft terminals to be offered then requirement of integration with full NMS server is not understood. If OEM didn't have existing NMS in NEA/MCA network how to integrate craft terminal as existing NMS is proprietary in nature. | Please refer response to clarification for S.N. 287 |

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| | *Local Craft Terminal for integration with a fullNMS server.* | | |
| 307. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 15 of 49 - 3.4 *The Contractor shall provide rack/wall mounted Fibre Optic Distribution Panels (FODPs) sized as indicated in the appendices and shall terminate the fibre optic cabling up to the FODPs.* | Please confirm whether 24 F or 48F Fiber Rackmounted /Wall Mounted fiber FODP to be proposed at New Butawal GIS S/S . | Please refer response to clarification for S.N. 288 |
| 308. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 220913_B02_ GTR 221123_Lot2_NBW_PSR11 of 49 17 of 53 11 of 64 - 11 10.3 *c. All Telecom equipment with all types of cards being supplied will conform to Type Tests as per Sections 10.1 to 10.5. The test reports submitted will be of the tests conducted within the last five (5) years.* *d. In case the test reports are older than five (5) years, the Contractor will repeat these tests at no extra cost to the Employer.* *10.3 The test reports submitted shall be of the tests conducted within the last 10 (ten) years* | Please confirm requirement of Type tests for Telecom is 10 years of 5 Years as both Technical specifications,PSR & GTR requirement are conflicting. | Please refer response to clarification for S.N. 289 |

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| | *before the originally scheduled date of bid opening.*<br>*1.3 Only type tested equipment shall be used. Type test reports of similar equipment - in terms of mechanical and electrical size/measures, mechanical and electrical technical data, similar model type, and not older than 10 years at bid opening, shall be accepted. Type Test Reports shall be subject to the Engineer's approval. If no type test certificates are available, the relevant type tests shall be performed at the Contractor's expenses* | | |
| 309. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 35 of 49 - 11.8<br>*v. Testing Tools*<br>*a. All testing kits for STM1, 4 16 & 64 shall be supplied*<br>*b. Testing kits for VC12 and VC4 shall be supplied*<br>*c. Ethernet testing tools shall be supplied.*<br>*d. OTDR and power & Sources shall be supplied* | Please confirm whether Testing Tools are to be supplied. If yes provide detailed specification & quantities of Testing tools so that all bidders will be on same platform. | Please refer response to clarification for S.N. 290 |
| 310. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 40 of 49 - 1 | Please provide configuration of offered EPABX system at RATAMATE S/S as details mnot provided TS/Techhnical datasheet i.e 1. no. Analog/ Digital Subscribers, | Please refer response to clarification for S.N. 291 |

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| | *The present section outlines the Technical Requirements applicable for the design, supply, installation and commissioning of VoIP private branch exchanges (EPABX) to be installed in New Butawal and associated telephone equipment for a complete operational private telephone system to be installed in related substations as an extension of the existing NEA phone system.*<br>*These technical requirements shall always be read in conjunction with the "General Technical requirements" in B.02 and Technical Data sheets in Vol.2* | 2. no. of IP Susbcribers,<br>3. No. of E1 Interface,<br>4. No. of E&M Interface<br>5. CO Lines<br>6. Power Supply & Control Card Redundnacy required or not<br>7. Operater Console PC Based or Phone based<br>8. Analog Subscriber qty & specification<br>9. DIgital Subscriber phone qty & specification<br>10. Attendant Phones qty & specification<br>11. Outdoor Telephone Sets quantity & Specification<br>12. IP Phone Qty & specification (SIP based or open SIP) | |
| 311. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 41 of 49 – 2<br>*The EPABX(s) will be located in the telecommunication room of Ratmate Substation to be built by Ratmate substation works contractor under MCA-Nepal substations Control buildings along with other communication equipment.*<br>*b. The Contractor will link with EPABX at Ratmate substation through remote extension via the SDH link* | The bidder understands RATAMATE S/S is mentioned by mistake & same should be read as New Butawal & there is integration requirement with RATAMATE S/S. Please confirm | Bidders may please review Figure-1 under CHAPTER-13 for better understanding. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| 312. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 43 of 49 – *h. The number of telephone sets to be installed is as follow:* *i. Two digital IP based Operators phone in each substation control room (New Butwal, New Damauli)* *ii. One digital IP based phone set for each office, each equipment room,* *conference room and guard room of each substation* *iii. Three digital IP based phone in each GIS hall of each substation* *iv. 10 Outdoor phone sets located strategically in the switchyard near* *maneuvering points and power transformers of each substation* *v. Two analogue 2W phone set for any local PSTN (Public Switched Telephone Network) lines for each substation* | Telephone Cabling in existing S/S's in New Damauli 1 & at New Butawal office, equipment room , guard room , control buiding, switchyard room will be in scope of MCA/NEA. Please confirm | Please refer response to clarification for S.N. 296 |
| 313. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 3 of 44 - 1.1 b), 1.1 d) & 1.1 e) *b. The sites included in this specification are the following:* *i. 400/220 kV New Damauli GIS Substation* *d. The Contractor will be* | The bidder understands scope of work involves supply of new SDH and Multiplexer equipment at New Damauli GIS S/S and augmentation of existing SDH equipment at Ratamate (to be supplied in LOT-1)& New Butawal (to be supplied in LOT-2). | Please refer response to clarification for S.N. 297 |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | *responsible for supply and installation of Interface cards of SDH multiplexer plus phone sets and coordinate with Ratmate Contractor through MCA-Nepal.*<br>*e. New SDH FO communication links, with associated terminal equipment, are required at 400 kV substations in Ratmate and New Butwal to integrate the existing communication network to the new 400 kV substations.* | | |
| 314. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 221123_Lot3_NDM_PSR3 of 44 5 of 62 - 1.1 c).iv) 1.1.b)<br>*c. iv. The fiber optic communication used for protection purpose between the Relays at the two ends of the circuit shall be as per the requirement.*<br>*b. The following transmission lines are associated with substation:*<br>*1. New Damauli – Ratmate 400 kV D/C Lines: 89 km (along with OPGW)*<br>*2. New Damauli – New Butwal 400 kV D/C Lines:90 km (along with OPGW)* | 1. Please confirm requirement under this project is Digital Protection Coupler is for Distance Protection only & no differential Protection interface are to be proposed with offered D&I Mux equipment.<br>2. Please confirm DPC qty & same is to be offered distance protection for following lines:<br>Ratamate- New Damauli 400kV D/C - 8 Nos. (4 at each end)<br>New Butawal- New Damauli 400kV D/C - 8 Nos. (4 at each end, 4 Nos. of New Butawal considered in LOT-2).<br>3. Please provide specifiation of Digital protection coupler. Whetehr NEA specification of DPC i.e 4 commmand , E1 , 48 V DC operated , COmamdn voltage upto 220VDC to be followed or additional IEC61850 ed.2 goose messaging support to be available in offered DIgital Protection coupler equipment. Please confirm. | Please refer response to clarification for S.N. 279 |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| 315. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 4 of 44 - 1.1 h) *Digital type measuring equipment shall comply with ITU-T (CCITT) Recommendation O.151.* | Please confirm whether Digital Type Measuring equipments are to be supplied. If yes provide detailed specification & quantities of Measuring equipment so that all bidders will be on same platform. | Please refer response to clarification for S.N. 280 |
| 316. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 5 of 44 - 1.2. i) *i. Testing tools for STM1,4, 16& 64 shall be supplied.* | Please confirm whether Testing Tools for STM-1,4, 16 & 64 are to be supplied. If yes provide detailed specification & quantities of Measuring equipment so that all bidders will be on same platform. | Please refer response to clarification for S.N. 281 |
| 317. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 5 of 44 - 2. c) c. Contractor to provide new RFTU to integrate to existing NEA EXFO NQMSFiber Remote Fiber Testing System. The new RFTS requirement shall be equal with existing RFTUM. | Please confirm requirement of new RFTU for integration to existing NEA EXFO Fiber Remote Fiber Testing System. Whether supply of the same in scope or not ? Please provide detailed specification & quantity for this requirement. | Please refer response to clarification for S.N. 282 |
| 318. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 6 of 44 - 2.1.b to e) *b. The SDH node shall be used for interconnection of terminal Substation to thefibre optic network and shall be based on the Synchronous Digital Hierarchy(SDH) having bit rate of STM-4/16 as specified in price schedule.* *c. New Generation SDH STM-16* | 1. Requirement of SDH Equipment not clear , please confirm whetehr SDH Equipment requirement is for STM-1/4/16<br>2. Upgradability to STM-64 is not understood nas NEA requirement currently is for STM-4/16 or MPLS-TP 1G/10G interfaces (~STM-64). In case offered equipment chassis supports MPLS-TP 1G or 10 G (equivalent to STM-64) & same can be upfgraded in fiuture with MPLS-TP interface cards, will it be acceptable to MCA. Please confirm<br>3. SDH Technology is getting obsolete & only | Please refer response to clarification for S.N. 283 |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | *(Upgradeable to STM-64) Add/DropMultiplexers (ADM)/ Equipment shall be provided and installed byCONTRACTOR at all sites to establish the fiber optics links specified in theSOW/TS. Specific system requirement of the New Generation SDH STM-16 Add/Drop Multiplexer equipment. d. CONTRACTOR shall provide and install STM-16 Optical Interfacecards/modules with single STM-16 TX and RX optical ports in eachcard/module. e. The SDH node will be upgradeable to STM-64.* | few selected manufacturers in Power Utility domain manufactures SDH equipment which supports STM-64 upgradability. Most of Utilities including NEA are transitioning for existing SDH installed base to MPLS-TP. Hence we request MCA to either limit the requirement to STM-1/4/16 which is used in NEA network in existing & ongoing requirements or in case much more capacity requirement please consider Hybrid MPLS-TP equipment which supports MPLS-TP/SDH/PDH with 1 G or 10G interfaces additionally it can provide STM-1/4/16 interfaces for interfacing with existing SDH equipment. | |
| 319. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 7 of 44 - 2.1.j) *j. Provide, install, test and commission (13 Nos.) thirteen sets of data/voice Multiplexer (Drop/Insert Operation). The Data/Voice Multiplexer equipment design shall be provided with 2 x 2.048Mbit/s aggregate ports, redundant power supply cards and redundant cross connect matrix cards (and/or E1 cards). Analog Voice and Data Interface cards shall be provided.* | Requirement is not clear. Is it requirement of 13 Nos. D&I Mux at Ratamate S/S or same is mentioned by mistake. Please provide detailed requirement for this point or else delete this clause. | Please refer response to clarification for S.N. 284 |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| 320. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 8 of 44 - 2.1 q) *The offered transmission equipment (SDH node) shall support an optical link of at least 375 km for STM-4 and 400 km for STM-16 without any repeater station in between. If required, a wavelength translator/optical amplifier shall be provided by the contractor.* | Please confirm type of optical interfaces proposed under this project for optical links to be proposed under this project i.e STM-4 or STM-16. | Please refer response to clarification for S.N. 285 |
| 321. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 8 of 44 - 2.2.b) & c) *b. SDH node will be STM-16 with five (5) MSP protected directions. c. Two (2) STM-16 (2.5Gbps) Aggregate optical fiber Interface cards operating in 1+1 protected configuration (4Fiber 1+1 MSP) directions towards remote substations each.* | 1. The bidder understands equipment to be proposed is STM-16,5 MSP & only 2 directions out of 5 protected directions should be equipped. Please confirm our understanding.<br>2. SDH Technology is getting obsolete & only few selected manufacturers in Power Utility domain manufactures SDH equipments. Most of Utilities including NEA are transitioning for existing SDH installed base to MPLS-TP. Please change requirement to MPLS-TP Hybrid 1G , 5 Protected directions.<br>3. In case bidder offers equivalent MPLS-TP 1G 5 Protected directions will it be acceptable. Please confirm. | Please refer response to clarification for S.N. 286 |
| 322. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 9 of 44<br>10 of 44 - 2.2.i)<br>2.2.1<br>*The New Generation SDH STM-16/4/1/2M Add/Drop Multiplexer* | 1. Please confirm whether new NMS to be supplied for monitoring of offered NG-SDH Equipment at Ratamate S/S or bidder has to supply only 03 Nos. LCT terminals loaded with craft terminal software for miantenance, configuration & provisioning.<br>2. Please confirm Laptops should be workstation | Please refer response to clarification for S.N. 287 |

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| | *equipment shall fully operate with the existing and/or new Telecommunication Network Management Systems.*<br>*i.The craft terminal for telecommunications equipment will be part of the engineering workstations.*<br>*iv. Provide THREE (3) Local Craft Terminals (loaded with original OperatingSystem and Application software) with interface converters and completeaccessories (battery pack, Power supply, carrying bag & optical mouse) to carry-out all local maintenance, Configuration, provisioning and alarm*<br>*v. Provisioning will be in the Local Craft Terminal for integration with a fullNMS server.* | based & no laptop to be provided for this requirement.<br>3. In case only Craft terminals to be offered then requirement of integration with full NMS server is not understood. If OEM didn't have existing NMS in NEA/MCA network how to integrate craft terminal as existing NMS is proprietary in nature. | |
| 323. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 13 of 44 - 3.4<br>*The Contractor shall provide rack/wall mounted Fibre Optic Distribution Panels (FODPs) sized as indicated in the appendices and shall terminate the fibre optic cabling up to the FODPs* | Please confirm whether 24 F or 48F Fiber Rackmounted /Wall Mounted fiber FODP to be proposed at New Damauli GIS S/S . | Please refer response to clarification for S.N. 288 |

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| 324. | Part 2: Employer's Requirements Section V B1 (Technical Specifications)<br>220913_B02_ GTR<br>221123_Lot3_NDM_PSR19 of 44<br>17 of 53<br>10 of 62 - 10<br>10.3<br>1.3.1<br>*c. All Telecom equipment with all types of cards being supplied will conform to Type Tests as per Sections 10.1 to 10.5. The test reports submitted will be of the tests conducted within the last five (5) years.*<br>*d. In case the test reports are older than five (5) years, the Contractor will repeat these tests at no extra cost to the Employer.*<br>*10.3 The test reports submitted shall be of the tests conducted within the last 10 (ten) years before the originally scheduled date of bid opening.*<br>*1.3.1 The only type of tested equipment shall be used. Type test reports of similar equipment - in terms of mechanical and electrical size/measures, mechanical and electrical technical data, similar model type -, and not older than* | Please confirm requirement of Type tests for Telecom is 10 years of 5 Years as both Technical specifications, PSR & GTR requirement are conflicting. | Please refer response to clarification for S.N. 289 |

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| | *10 years at bid opening, shall be accepted.* | | |
| 325. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 31 of 44 - 10.8<br>*v. Testing Tools*<br>*a. All testing kits for STM1, 4 16 & 64 shall be supplied*<br>*b. Testing kits for VC12 and VC4 shall be supplied*<br>*c. Ethernet testing tools shall be supplied.*<br>*d. OTDR and power & Sources shall be supplied.* | Please confirm whether Testing Tools are to be supplied. If yes provide detailed specification & quantities of Testing tools so that all bidders will be on same platform. | Please refer response to clarification for S.N. 290 |
| 326. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 35 of 44 - 1<br>*The present section outlines the Technical Requirements applicable for the design, supply, installation and commissioning of telephone systems to be installed in New Damauli and associated telephone equipment for a complete operational private telephone system to be installed in related substations as an extension of the existing NEA phone system.*<br>*These technical requirements shall always be read in conjunction with* | Please provide configuration of offered EPABX system at RATAMATE S/S as details mnot provided TS/Techhnical datasheet i.e<br>1. no. Analog/ Digital Subscribers,<br>2. no. of IP Susbcribers,<br>3. No. of E1 Interface,<br>4. No. of E&M Interface<br>5. CO Lines<br>6. Power Supply & Control Card Redundnacy required or not<br>7. Operater Console PC Based or Phone based<br>8. Analog Subscriber qty & specification<br>9. DIgital Subscriber phone qty & specification<br>10. Attendant Phones qty & specification<br>11. Outdoor Telephone Sets quantity & Specification | Please refer response to clarification for S.N. 291 |

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| | *the "General Technical requirements" in B.02 and Technical Data sheets in Vol.2* | 12. IP Phone Qty & specification (SIP based or open SIP) | |
| 327. | Part 2: Employer's Requirements Section V B1 (Technical Specifications) 38 of 44 – *h. The number of telephone sets to be installed is as follow: i. Two digital IP based Operators phone in each substation control room (New Damauli, New Butwal) ii. One digital IP based phone set for each office, each equipment room, conference room and guard room of each substation iii. Three digital IP based phone in each GIS hall of each substation iv. 10 Outdoor phone sets located strategically in the switchyard near maneuvering points and power transformers of each substation v. Two analogue 2W phone set for any local PSTN (Public Switched Telephone Network) lines for each substation* | Telephone Cabling in existing S/S's in New Butwal & at New Damauli office, equipment room , guard room , control buiding, switchyard room will be in scope of MCA/NEA. Please confirm | Please refer response to clarification for S.N. 296 |
| 328. | PROJECT SPECIFIC REQUIREMENT (PSR) 400KV RATMATE Substation, Document | In the Base Scope, 220KV Line Bays is shown as 2 Nos. But as per BOQ 220KV line bay is not shown. Bidder are not considering any Protection for 220KV Line Bays at Ratmate Substation | The 220 kV line bays are for the future lines. Line protection for those bays is not in the scope of the contract. However, the scope shall include diameter protection and |

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| | No: B1.1, Clause: 2.1.1 Scope of Work - Base<br>*Ratmate Base Scope of Work : Table of Qty, 220KV Line Bay - 2 Nos* | | also the protection of the associated stubs and of the tie breaker. |
| 329. | PROJECT SPECIFIC REQUIREMENT (PSR) 400KV RATMATE Substation, Document No: B1.1, Clause: 2.1.2 Scope of Work - Base*2 Bay Integration work at 400KV New Hetauda Substation* | The Bidder understands the 2 Nos 400 KV Line Bays which is getting terminated at New Hetauda needs to be integrated with Existing Busbar and Existing SAS. We request to provide the existing SCADA System and Existing Busbar for Integration.<br><br>Also, Please confirm the Existing Scheme of Busbar and also necessary slot is available for Integration with Existing Busbar | The existing Bus bar scheme is one and half breaker scheme. The details of the existing SCADA system will be provided to the successful bidder during detailed engineering. |
| 330. | PROJECT SPECIFIC REQUIREMENT (PSR) 400KV RATMATE Substation, Document No: B1.1, Clause: 2.1.2 Scope of Work – Base<br>*2 Bay Integration work at 400KV Lapsiphedi Substation* | The bidder understands the 2 Nos 400 KV Line Bays which is getting terminated at New Hetauda needs to be integrated with Existing Busbar and Existing SAS. We request to provide the existing SCADA System and Existing Busbar for Integration.<br><br>Also, Please confirm the Existing Scheme of Busbar and also necessary slot is available for Integration with Existing Busbar | The existing Bus bar scheme is one and half breaker scheme. The details of the existing SCADA system will be provided to the successful bidder during detailed engineering. |
| 331. | PROJECT SPECIFIC REQUIREMENT (PSR) 400KV RATMATE Substation, Document No: B1.1, Clause: 2.2 OPTION SCOPE OF WORK<br>*Ratmate Option Scope of Work : Table of Qty, 220KV Trafo Bay - 5 Nos* | The bidder Understands for the 5 Nos of 220KV Trafo Requirement - 3 Nos is LV Side of 400/220KV Trafo and 2 Nos is for HV side of 2 Nos of 220/132KV Trafo Protection | Confirmed |

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| 332. | PROJECT SPECIFIC REQUIREMENT (PSR) - Common for 400KV RATMATE Substation, 400KV New Butwal, New Damauli<br>Document No: B1.1, Clause: 3.8 Automation and Telecommunication System and Document BOQ of Ratmate Substation Line Item 2.8.4, 2.8.4.1, 2.8.4.2, 2.8.4.3, 2.8.4.4, 2.8.4.5<br>Document BOQ of New Butwal Substation Line Item 2.7.4, 2.7.4.1, 2.7.4.2, 2.7.4.3, 2.7.4.4, 2.7.4.5<br>Document BOQ of New Damauli Substation Line Item 2.7.3, 2.7.3.1, 2.7.3.2, 2.7.3.3, 2.7.3.4, 2.7.3.5<br>*Substation Automation & Metering System*<br>*Substation Automation System (SAS) for 400 kV System per diameter*<br>*Substation Automation System (SAS) for 220 kV System per diameter*<br>*Substation Automation System (SAS) for 33 kV System per diameter*<br>*Substation Automation System (SAS) for Auxiliary System* | The bidder understands they need to provide One Substation Automation for the whole 400KV Substation and they need to integrate all the Bays of 400KV, 220KV and 33KV in the SCADA System. they need to Provide Necessary EFS, LIU, BCU for Controlling the Bays from SCADA. Please confirm | Confirmed. |

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| 333. | PROJECT SPECIFIC REQUIREMENT (PSR) Common for 400KV RATMATE Substation, 400KV New Butwal, New Damauli<br>Document No: B1.1, Clause: 3.8 Automation and Telecommunication System<br>*Integration of SCADA Data: The system under the present scope shall be integrated by the Contractor into the existing SAS of Siemens 'SINAUT Spectrum" (version 4.3.2) installed at the Master Station (i.e., Nepal Electricity Authority) LDC* | As the LDC is of Siemens Make, the bidder request MCA/NEA to remove the clause as it will be advantage for Siemens. Requesting to considered Integration in NEA Scope only | This is specific requirement of the project. Bidders are requested to adhere to the requirement of the bid. |
| 334. | PROJECT SPECIFIC REQUIREMENT, Common for 400KV RATMATE Substation, 400KV New Butwal, New Damauli<br>Document No: B1.1, Clause: 3.8 Two (2) 400 KV Busbar<br>● *The primary protection element for the bus bars shall be low impedance bus differential* | Please confirm can bidder provide Redundant Low Impedance Centralized Busbar Protection for 400 and 220KV | Confirmed. Busbar Protection scheme will be centralized such that it is ensured that tripping can happen on the faulted bus even if one of the systems is out of service. Bidders are requested to adhere to the requirement of the bidding document. |
| 335. | PROJECT SPECIFIC REQUIREMENT (PSR) 400KV NEW BUTWAL SUBSTATION<br>Document No: B1.1, Clause: 3.9 CONTROL AND PROTECTION<br>*400 kV new Overhead Lines :* ● *The primary protection element* | Please confirm the requirement and Scope of Remote End Line Differential Relay for India Border Line 1 and Line 2. | Kindly adhere to the requirement of the bidding document. |

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| | *for the Overhead Lines in both Main and Main II protection schemes shall be line current differential with communication between local and remote relays provided by fiber optic communication channels* | | |
| 336. | CHAPTER 10: CONTROL AND RELAY SPECIFICATION - Common for 400KV RATMATE Substation, 400KV New Butwal, New Damauli *3.4. CIRCUIT BREAKER PANEL - Auto- Reclose Scheme* | Auto-Reclose Shall be integral part of the Bay Control Unit. Please confirm | Confirmed |
| 337. | CHAPTER 10: CONTROL AND RELAY SPECIFICATION - Common for 400KV RATMATE Substation, 400KV New Butwal, New Damauli *2.3. INTERNAL WIRING, ii. Current transformer circuits, other metering circuits control: 6 mm2.* | Can we propose 4 $mm^2$ for CT Circuits and Metering Circuits | Kindly adhere to the requirement of bidding document. |
| 338. | CHAPTER 10: CONTROL AND RELAY SPECIFICATION - 3.6. METERING PANEL Common for 400KV RATMATE Substation, 400KV New Butwal, New Damauli *3.6. METERING PANEL: Two (2) Power Quality and Energy meters, test terminal blocks, with cut out and wiring; -* | 1. Please confirm the Accuracy Class of the Meter.<br>2. Bidder shall provide Meter data on MODBUS Protocol and RS485 Cable. Please confirm<br>3. Please provide if any specific Make of Energy Meter to be considered<br>4. The bidder are not considering and Online Metering Software - Please confirm<br>5. ABT features integration with SAS Is not considered in Scope. Other then ABT Features Meter Data shall be made available in Scada | 1. Revenue accuracy class as per NEA.<br>2. Meter to be accessible local and remotely. Interface to be coordinated by the Engineer during project execution.<br>3. To be coordinated by the Engineer during project execution<br>4. Refer to #2 above |

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| | | System - Please confirm<br>6. Please Provide the Power Quality Requirements required | 5. ABT (Availability based tariff) features to be coordinated by Engineer at project execution stage.<br>6. To be coordinated by Engineer at project execution stage. |
| 339. | CHAPTER 10: CONTROL AND RELAY SPECIFICATION - Common for 400KV RATMATE Substation, 400KV New Butwal, New Damauli<br>*1.1. GENERAL RELAY REQUIREMENTS:*<br>*d. Relays shall be numerical or digital type and communication protocol shall comply with IEC 61850 (MMS), 60870-5-104 and/or DNP3 as specified in SCADA section.* | The bidder Understands as per the SCADA System Architecture we need to Considered all Numerical Relays and BCU to Communicate on IEC61850 PRP Protocol | Kindly adhere to the requirement of the bidding document. |
| 340. | CHAPTER 10: CONTROL AND RELAY SPECIFICATION - Common for 400KV RATMATE Substation, 400KV New Butwal, New Damauli<br>*6. SPARE PARTS* | The bidder shall considered the Spare Parts mentioned in the Technical Specification as per the referred clause for all the 3 Substation | Please refer the technical specifications. |
| 341. | CHAPTER 10: CONTROL AND RELAY SPECIFICATION - Common for 400KV RATMATE Substation, 400KV New Butwal, New Damauli<br>*3.8. INTERFACE PANEL* | As bidder is providing Control and Relay panel separately for 400 and 220KV. All the interface shall be routed through the control panel. Hence, the Interface Panel is not required. Please confirm | This is in the detailed design by the contractor, subject to approval by the Engineer. |

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| 342. | CHAPTER 10: CONTROL AND RELAY SPECIFICATION - Common for 400KV RATMATE Substation, 400KV New Butwal, New Damauli<br>*3.9. BAY CONTROL UNIT (BCU)*<br>*The Bay Control unit and the numerical relays supplied under present scope shall be connected to the Ethernet switch. The Ethernet switch shall comply with IEC 61850-3 requirements. It shall have sufficient number of ports to accommodate*<br>*all the IEDs of the new bays and at least 6 spare ports for integrating the numerical Relays/BCUs with NTAMC system i.e. redundant Gateways/RTU and redundant SDC and two spare ports. The IP addressing scheme for the devices shall be provided.* | The bidder is Providing Data Till the Gateway of the Substation. As per Scope the data shall be integrated with the LDC of NEA which is located at Suichatar. And the bidder understands NTAMC System is not available in NEA | Kindly adhere to the requirement of Bid. |
| 343. | CHAPTER 10: CONTROL AND RELAY SPECIFICATION - Common for 400KV RATMATE Substation, 400KV New Butwal, New Damauli<br>*1.1. GENERAL RELAY REQUIREMENTS*<br><br>*Relays shall be numerical or digital type and communication protocol shall comply with IEC* | The bidder shall provide Relays which are compatible with IEC61850 and DNP3 Protocol | Bidders shall provide relays adhering to the requirement of the technical specifications. |

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| | *61850 (MMS), 60870-5-104 and/or DNP3 as specified in SCADA section.* | | |
| 344. | CHAPTER 10: CONTROL AND RELAY SPECIFICATION - Common for 400KV RATMATE Substation, 400KV New Butwal, New Damauli<br>*1.1. GENERAL RELAY REQUIREMENTS*<br><br>*o. All numerical and digital relays shall provide the following:*<br>*ii. Relay shall have SCADA connection capability compliant with IEC 61850, IEC 60870-5-107 and DNP3 for future use.* | The bidder shall provide Relays which are compatible with IEC61850 and DNP3 Protocol | Bidders shall provide relays adhering to the requirement of the technical specifications. |
| 345. | CHAPTER 10: CONTROL AND RELAY SPECIFICATION - Common for 400KV RATMATE Substation, 400KV New Butwal, New Damauli<br>*2.1. TRANSMISSION LINE PROTECTION*<br><br>*d. Relays shall be suitable for CVT connections, with transient response and nonelectronic damping. Relays shall be capable of a minimum of two (2) three phase voltage transformer inputs. These two inputs shall allow the* | For Sync Check Application. One 3 Phase VT and One Ph-Ph/Ph-N VT's Shall be provided. Please confirm | To be reviewed and approved by the Engineer at project execution stage |

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| | *relay to perform sync-checks for two breakers.* | | |
| 346. | CHAPTER 10: CONTROL AND RELAY SPECIFICATION - Common for 400KV RATMATE Substation, 400KV New Butwal, New Damauli *In case the remote end circuits are equipped with the multifunction latest relays, the remote end relay FPFM & FPSM shall be retained and the new local end relays for FPFM & FPSM shall match with the remote end. It shall be in line with the scheme requirement and subject to approval during the bidding stage.* | Please clarify what is FPFM and FPSM? | Feeder Protection First Main (FPFM) and Feeder Protection Second Main (FPSM) |
| 347. | CHAPTER 10: CONTROL AND RELAY SPECIFICATION - Common for 400KV RATMATE Substation, 400KV New Butwal, New Damauli *5.3. TEST EQUIPMENT AND FACILITIES* | All Necessary are maintained along with its calibrated report in the Manufacturing Location. | Confirmed |
| 348. | CHAPTER 11: 1. SUBSTATION AUTOMATION SYSTEM - Common for 400KV RATMATE Substation, 400KV New Butwal, New Damauli | The bidder is not considering AVR Supply in Scope for Transformer. The AVR Commands shall be executed from the BCU. Please confirm | The bid is for turn-key substation as per technical specification. Everything is in the scope of the contractor, whether the AVR is coming with the transformer or is part of SAS. |

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| | *ii. Bay Level Components*<br>*e. AVR for transformer monitoring and control* | | |
| 349. | CHAPTER 11: 1. SUBSTATION AUTOMATION SYSTEM - Common for 400KV RATMATE Substation, 400KV New Butwal, New Damauli<br>*6.2. Virtualization Architecture* | As the Requirment calls for SAS HMI Client 1& 2, SAS HMI Scada, SAS HMI Historean. Please let us know the Sizing Calculation Required of VMWare or Similar sofftware required in the Virtualization Server | The same shall be decided during detailed engineering. |
| 350. | CHAPTER 11: 1. SUBSTATION AUTOMATION SYSTEM - Common for 400KV RATMATE Substation, 400KV New Butwal, New Damauli<br>*10. MULTIFUNCTION POWER SYSTEM MONITORING*<br><br>*A multifunction IED (IEEE C37.118.1/C37.118.2) for system monitoring will*<br>*be provided. The IEDs will be accessible from the station engineering*<br>*workstation installed with the vendor data collection and analysis software.* | The bidder Understands this is Power Quality Analayser Requirement which includes PMU and PQM Datas. Please confirm whether we need to considered for all Bays. Please confirm | To be coordinated by Engineer during project execution stage. |
| 351. | Chapter 10,<br>S2 TS CRP Prot RATMATE Substation. - 2.5 Bus Protection<br>*Bus protection shall be redundant at the 220 and 400 kV voltage level.* | For Busbar Protection scheme for 220 kV & 400 kV Voltage level shall be redundant i.e. whether we have to provide Bus differential relay main 1 and main 2 relays of different manufacturer. Busbar Protection scheme for Substation is considered as Centralized Busbar Protection | The requirement of manufacturer will be determined during detailed engineering subject to the approval of Engineer. Busbar Protection scheme will be centralized such that it is ensured that tripping can happen |

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| | *This fully redundant system shall comprise a microprocessor - based low impedance percentage-slope differential bus protection scheme.*<br>*The design shall ensure tripping can happen on the faulted bus, even if one of the systems is out of service.* | scheme.<br>Please confirm whether above considerations are correct | on the faulted bus even if one of the systems is out of service. |
| 352. | BOQ Lot 1 RAT Base & - 2.8.4.10 400 kV Metering, 2.8.4.11 220 kV Metering<br>*b. The meter panel will contain the following quantities of the listed schemes and functionality.*<br>*i. Two (2) Power Quality and Energy meters, test terminal blocks, with cut out and wiring* | Detailed Technical specification of Power Quality and Energy Meter is required. Technical specification for same is missing. | MCA-Nepal may issue an addendum to the bidding document after receiving approval of the authority specifying the technical specifications for the power quality and energy meter. |
| 353. | BOQ Lot 1 RAT Base - Clause No. 2.8.4, 2.8.4.1, 2.8.4.2, 2.8.4.3, 2.8.4.4, 2.8.4.5<br>*SAS Operator Station for control of 400/220/33 kV: 1 Set*<br>*Substation Automation System (SAS) for 400 kV System per diameter: 4 Set*<br>*Substation Automation System (SAS) for 220kV System per diameter: 2 Set*<br>*Substation Automation System (SAS) for 33kV System per feeder: 2 Set* | Considered the supply of single set of Substation Automation System accommodating all the bay of 400 kV, 220 kV & 33 kV level.<br>Please confirm whether above considerations are correct | Please refer response to clarification for S.N. 332 |

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| | *Substation Automation System (SAS) for Auxiliary System: 1 Set* | | |
| 354. | Ch 10 S1-S2 TS CRP NBW - 2.5 Bus Protection<br>*Bus protection shall be redundant at the 220 and 400 kV voltage level.*<br>*This fully redundant system shall comprise a microprocessor - based low impedance percentage-slope differential bus protection scheme.*<br>*The design shall ensure tripping can happen on the faulted bus, even if one of the systems is out of service.* | For Busbar Protection scheme for 220 kV & 400 kV Voltage level shall be redundant i.e. whether we have to provide Bus differential relay main 1 and main 2 relays of different manufacturer. Busbar Protection scheme for Substation is considered as Centralized Busbar Protection scheme.<br>Please confirm whether above considerations are correct | Please refer response to clarification for S.N. 351. |
| 355. | BOQ Lot 2 NBW Base - 2.7.4.10: 400 kV Metering<br>2.7.4.11: 220kV Metering<br>*b. The meter panel will contain the following quantities of the listed schemes and functionality.*<br>*i. Two (2) Power Quality and Energy meters, test terminal blocks, with cut out and wiring* | Detailed Technical specification of Power Quality and Energy Meter is required. Technical specification for same is missing. | Please refer response to clarification for S.N. 352. |
| 356. | BOQ Lot 2 NBW Base - Clause No. 2.7.4, 2.7.4.1, 2.7.4.2, 2.7.4.3, 2.7.4.4<br>*SAS Operator Station for control of 400/220/33 kV: 1 Set* | Considered the supply of single set of Substation Automation System accomodating all the bay of 400 kV, 220 kV & 33 kV level.<br>Please confirm whether above considerations are correct | Please refer response to clarification for S.N. 332 |

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| | *Substation Automation System (SAS) for 400 kV System per diameter: 3 Set*<br>*Substation Automation System (SAS) for 33kV System per feeder: 2 Set*<br>*Substation Automation System (SAS) for Auxiliary System: 1 Set* | | |
| 357. | Ch 11 S1-S2 TS CRP - 2.5 Bus Protection<br>*Bus protection shall be redundant at the 220 and 400 kV voltage level.*<br>*This fully redundant system shall comprise a microprocessor - based low impedance percentage-slope differential bus protection scheme.*<br>*The design shall ensure tripping can happen on the faulted bus, even if one of the systems is out of service.* | For Busbar Protection scheme for 220 kV & 400 kV Voltage level shall be redundant i.e. whether we have to provide Bus differential relay main 1 and main 2 relays of different manufacturer. Busbar Protection scheme for Substation is considered as Centralized Busbar Protection scheme.<br>Please confirm whether above considerations are correct | Please refer response to clarification for S.N. 334 |
| 358. | BOQ Lot 3 New Damauli - 2.7.3.9: 400 kV Metering<br>*b. The meter panel will contain the following quantities of the listed schemes and functionality.*<br>*i. Two (2) Power Quality and Energy meters, test terminal blocks, with cut out and wiring* | Detailed Technical specification of Power Quality and Energy Meter is required. Technical specification for same is missing. | Please refer response to clarification for S.N. 352. |

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| 359. | BOQ Lot 3 New Damauli - Clause No. 2.7.3, 2.7.3.1, 2.7.3.2, 2.7.3.3, 2.7.3.4, 2.7.3.5<br>*SAS Operator Station for control of 400/220/33 kV: 1 Set*<br>*Substation Automation System (SAS) for 400 kV System per diameter: 3 Set*<br>*Substation Automation System (SAS) for 33kV System per feeder: 2 Set*<br>*Substation Automation System (SAS) for Auxilliary System: 1 Set* | Considered the supply of single set of Substation Automation System accommodating all the bay of 400 kV, 220 kV & 33 kV level.<br><br>Please confirm whether above considerations are correct | Please refer response to clarification for S.N. 332 |
| 360. | 400kV GIS - Lot-1 - 2.18.2.2,2.18.2.3 2.18.4.2, 2.18.6.2, 2.18.8.2 pg 38, 39 & 189/302<br><br>Lot-2-2.17.2.2,2.17.2.3 2.17.3.2, 2.17.4.2, 2.18.5.2 pg 109 & 233/302<br><br>Lot-3- 2.17.2.2,2.17.2.3 2.17.3.2, 2.17.4.2, 2.17.5.2 pg 148 & 272/302<br>*Circuit breakers,4000A: (for 400kV)*<br>*Complete sets of main contacts - 1Lot*<br>*Complete sets of arcing contacts - 2Lot*<br>*Disconnect Swithces,4000A: (for 400kV)* | Factory set up of tools and tackles are needed to assemble & test the contacts, hence these contacts cannot be assembled at site. Hence not feasible to quote as separate item. However main and arcing contacts are already integral part of complete CB pole assembly of spare item. Similarly, DS, ES and HES contacts are already integral part of respective complete pole. Please confirm. | Bidders are requested to comply with the requirement of the Bidding Document. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | *Complete set of contacts - 2Nos*<br>*Maintenance Earthing switches: (for 400kV)*<br>*Complete set of contacts - 2Nos*<br>*High speed earthing switches: (for 400kV)*<br>*Complete set of contacts - 2Nos* | | |
| 361. | 400kV GIS - Schedule 4.4.2 : Breakdown for day work rates: Materials.<br>*4.4.2.6 - Price for control point on wave switching Device (CPWSD) to be installed on 400kV Breaker supplied as per schedule-2* | Schedule-2 is for complete bays. Request to clarify the description - whether add on price for one no.of CSD to be indicated for this item? | Unit price for CPWSD in Schedule 4.4.2 is required in case TRV study is to be performed by the contractor, the study will indicate the need to add this device to the line breakers. *(Prices for CPWSD for breakers associated with the transformers are already included in the breaker price in the Schedule 2).* |
| 362. | 400kV GIS - Schedule 4.4.2 : Breakdown for day work rates: Materials.<br>*4.4.2.7 - Price for Pre-Insertion Resistor (PIR) to be installed on 400kV Breaker supplied as per Schedule-2* | Schedule-2 is for complete bays. Request to clarify the description - whether add on price for one no. CB with PIR to be indicated for this item? | Unit price for CP with PIR in Schedule 4.4.2 is required in case TRV study is to be performed by the contractor, the study will indicate the need to add this device to the line breakers. *(Prices for CP with PIR for breakers associated with the transformers are already included in the breaker price in the Schedule 2).* |
| 363. | 400kV GIS - Lot-1-RTE-3.1 e iii,f iii,g iii,h iii, I iii, j i pg 15-18<br>Lot-2-NBW-3.1 e iii,f iii,g iii,h iii, I iii<br>*three-phase sets of single-phase encapsulated, independent pole, circuit breaker isolating disconnect switches and* | Single phase encapsulated independent pole disconnector switches and Earthing switches with manual and motor driven gang operated mechanisms are proposed. Please confirm | Confirmed. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | *maintenance earthing switches complete with manual and motor-driven operating mechanisms* | | |
| 364. | 400kV GIS - Lot 1-3.2 J ii<br>Lot 3-3.2 J ii pg 13<br>*ii. (2) two trifurcation modules to transition from three single-phase encapsulated, independent pole, autotransformer isolating disconnect switches to single-phase gas-insulated bus extension to a gas-to-air bushing module for the spare autotransformer* | As our offered GIS is single phase encapsulated design, hence trifurcation module is not applicbale.<br>As per customer given layouts, bidder understands busduct with SF6 to airbushing termination for spare auto transformer. | The requirement should be as per the technical specification which shall be finalized during the detailed engineering by the Contractor subject to the approval of Engineer. |
| 365. | 400kV GIS - 8.7.1 pg 17<br>9.1.12 pg 23<br>*o. 3D Model of GIS general arrangement drawings* | 3D models shall be provided in .iges or .stp format. | Confirmed. The model should also be provided in PDF and should be compatible to AUTOCAD also. |
| 366. | 400kV GIS - 9.1.11 pg 22<br>*Temperature rise of current carrying parts shall be limited to the values stipulated in IEC 62271-1, under rated current and the climatic conditions at site. The temperature rise for all enclosures shall not exceed 20 °C above the ambient temperature of 50 °C.* | Temperature rise of current carrying parts shall be as per latest IEC 62271-1 Table 14. Please confirm | Confirmed. |
| 367. | 400kV GIS - 9.2.13 pg 24<br>12.2.17 pg 46<br>*A gas density monitoring system (GDM) integrated with existing communication systems including gas density monitors (with alarm* | Gas density monitoring system shall be with temperature compensated gas density switches with RS485 interface wired up to GIS LCC. Transducers, hardware and software system, HMI are excluded.<br>Please confirm | Bidders must understand that this is a turn-key contract and hence, nothing is excluded that fulfills the scope of works of the Contract as per the technical specifications. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | *contacts), gas density monitoring (GDM with transducers) hardware and software system, pressure relief devices, gas filling connections and Human Machine Interface (HMI).*<br>*The Contractor shall also provide a stand-alone Gas Density Monitoring (GDM) system using SF6 gas density transducers. The GDM shall have RS-485 serial communication with distributed network protocol (DNP) to transmit gas zone and system alarms to the Employer's Human Machine Interface (HMI) system* | | |
| 368. | 400kV GIS - 9.3.7 pg 26<br>*Ferroresonance study - to determine if interactions between the GIS bus or interconnected cables and wound voltage transformers produce a resonance situation and require the installation of tuned inductors on the voltage transformer secondaries.* | Ferro resonance study is required when GIS CBs are with double interrupter & uses capacitors for voltage distribution. As Offered CBs are with single interrupter design, requirement of damperning device on VT secondaries is not required and hence the study. PLease confirm | Kindly adhere to the requirement of the Bidding Document. |
| 369. | 400kV GIS - 11.4 pg 27<br>*Bushing insulation properties - 400kV - 1550kVp* | Request to confirm as the BIL given is for 550kV level. For 400kV, BIL shall be 1425 kVp. | Please refer response to clarification for S.N. 245. |
| 370. | 400kV GIS - 12.4.5 pg 52<br>*For Isolating Disconnect Switches and Maintenance Earthing* | 4NO+4NC shall be spare auxiliary contacts available for multiplication as required. Kindly note auxiliary contacts are not | Confirmed. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | *Switches:*<br>*A minimum of 12 "a" and 12 "b" auxiliary contacts shall be provided for each switch that are field reversible for the Employer's use.* | reversible/adjustable at site due to safety reasons. Please confirm | |
| 371. | 400kV GIS - 12.6.9 pg 56<br>*CTs : Shielded cables with a minimum of 6 mm2 stranded copper conductor shall be used for wiring between the current transformer and the LCC.* | 4 sq.mm stranded copper conductor is used for wiring between the CT and the LCC. Please confirm | . Please refer response to clarification for S.N. 337. |
| 372. | 400kV GIS - 12.10.2 & 12.10.3 pg 59 *The connection shall be equipped with a removable link to permit separation of GIB and GIS for high voltage testing.*<br>*The Employer's preference is for the GIL removable link to be located inside the GIS enclosure for an indoor GIS.* | Please clarify this requirement. Removable telescopic conductor shall be provided for separation of GIB and GIS. Requirement of the same shall be decided during detailed Engineering stage depending on the test circuit. | The requirement should be as per the technical specification which shall be finalized during the detailed engineering by the Contractor subject to the approval of Engineer. |
| 373. | 400kV GIS - 12.13.13 pg 62<br>*Marshaling cabinets may also be required and are acceptable as intermediate termination locations between the GIS and LCC and LCC and the substation control room.* | Terminal box shall be provided at GIS end. Marshalling box is not provided in GIS. Please confirm | The requirement should be as per the technical specification which shall be finalized during the detailed engineering by the Contractor subject to the approval of Engineer. |
| 374. | 400kV GIS - 12.18.1 pg 66<br>*The GIS shall be provided with capacitive voltage couplers, with provisions for the attachment of a voltage measuring device for* | UHF sensors shall be provided for PD monitoring. On-line PD monitoring system can measure and monitor PD in GIS with expert system software for diagnosis. Capacitive voltage couplers are not provided for voltage | The requirement should be as per the technical specification which shall be finalized during the detailed engineering |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | *diagnostic monitoring and ultra-high-frequency partial discharge (PD) measurement* | measurement as all outgoing feeders are with Voltage transformer. Please confirm | by the Contractor subject to the approval of Engineer. |
| 375. | 400kV GIS - 1. pg 102<br>● *Gas Density Monitoring (GDM) equipment for each gas zone with Human Machine Interface (HMI).* | GDM shall be with temperature compensated gas density switches with RS485 ports wired up to LCC. There will not be any HMI in LCC. Please confirm. | Kindly adhere to the requirement of the bidding document. |
| 376. | 400kV GIS - 2 pg 103<br>*System X/R (maximum) X/R = TBD (shall be finalized after study report)* | Please provide the X/R ratio value. | X/R ratio value will be determined during the detailed engineering based on the Contractor's System Studies. |
| 377. | 400kV GIS - 2 c) pg 106<br>*Ambient temperature range : -30 ºC up to +40 ºC* | Temperature range shall be -20 to +50 deg C. Please confirm | Bidders are requested to abide by the requirement of the Bidding document. |
| 378. | 400kV GIS - 2 e) pg 107<br>*GIS CT : Mechanical design - Indoor class, temp range -30 to +50°C* | Temperature range shall be -20 to +50 deg C. Please confirm | Bidders are requested to abide by the requirement of the Bidding document. |
| 379. | 400kV GIS - 2 f) pg 107<br>*GIS VT: Accuracy class 0.3WXYZ* | Please clarify the accuracy class for VTs. | Accuracy Class is as indicated in the technical specifications. |
| 380. | Price Schedule Lot1 Base - 220kV GIS PS:2.7.1,2.7.2,2.7.3,2.7.4 & SLD:RTE-101-2 Rev 2<br>*220kV Double 3 single phase(isolated) SF6 gas insulated,metal enclosed 4000A busbars each enclosed in three individual bus enclosures per diameter - 2 Diameter* | Given SLD indicated 6 and half dia, however given price schedule for Lot1 Base indicated two diameter. Please clarify the actual requirement. | Bidders are suggested to refer Scope of Works-Base Scope under Part 2: Employer's Requirements Section V – B1 (Project Specific Requirements) |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| 381. | Price Schedule Lot1 Base - 220kV GIS 2.7.2.14<br>*Isolating and Earthing switches, 400kV,4000A,50kA single phase and Gas insulated Bus(GIB) for spare transformer, with auxiliary bus,GIS to AIS bushing termination….* | Not applicable to 220kV GIS as it is indicated as 400kV.<br>Please confirm | MCA-Nepal will issue an addendum regarding the same. |
| 382. | Price Schedule Lot1 Base - 220kV GIS 2.14.1.17<br>*Online Partial discharge monitoring system* | Please clarify online PD Monitoring is applicable for 400kV GIS only or both 400kV & 220kV GIS.<br>Please confirm | Online partial discharge will be applicable for both 400kV & 220kV System. |
| 383. | Price Schedule Lot1 Base - 220kV GIS 2.7.1,2.7.2,2.7.3,2.7.4<br>*220kV Double 3 single phase(isolated) SF6 gas insulated,metal enclosed 4000A busbars each enclosed in three individual bus enclosures per diameter - 7 Diameter* | Given SLD indicated 6 and half dia, however given price schedule for Lot1 Option indicated 7 diameter. Please clarify the actual requirement.<br>Please confirm | Bidders are suggested to refer Clause 2.2 Option Scope of Work under Part 2: Employer's Requirements Section V – B1 (Project Specific Requirements) |
| 384. | Price Schedule Lot1 Base - 220kV GIS 2.7.2.14<br>*Isolating and Earthing switches, 400kV, 4000A, 50kA single phase and Gas insulated Bus (GIB) for spare transformer, with auxiliary bus, GIS to AIS bushing termination.* | Not applicable to 220kV GIS as it is indicated as 400kV. Please confirm | MCA-Nepal may issue an addendum to the bidding document subject to the approval of authority. |
| 385. | Section V - B1 (Project Specific Requirements) - 220kV GIS 3.2 e iii,f iii,g iii,h iii<br>*three-phase sets of single-phase encapsulated, independent pole,* | Single phase encapsulated independent pole disconnect switch with combined earthing switch with manual and motor driven gang operated mechanisms.<br>Please confirm | Please refer response to clarification for S.N. 363 |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | *circuit breaker isolating disconnect switches and maintenance earthing switches complete with manual and motor-driven operating mechanisms* | | |
| 386. | Section V - B1 (Project Specific Requirements) - 220kV GIS 3.2 J ii<br>*ii. (2) two trifurcation modules to transition from three single-phase encapsulated, independent pole, autotransformer isolating disconnect switches to single-phase gas-insulated bus extension to a gas-to-oil termination bushing module for the spare autotransformer* | As offered GIS is single phase encapsulated design, hence trifurcation module is not applicbale.<br>As per customer given layout RTE-200-1 Rev10,we understand busduct with SF6 to airbushing termination for spare auto transformer.<br>Please confirm | Please refer response to clarification for S.N. 364. |
| 387. | Customer layout: RTE-200-1 &<br>SLD: RTE-101-2 Rev 2 - 220kV GIS SLD: RTE-101-2 Rev 2<br>*220kV GIS Line/Transformer/BC bay* | As per customer given SLD, there is no future bays shown, hence we do not consider space for future dia. If require space for future bays, please clarify number of future dia space to consider. | The GIS building should provide space for the full scope (Option), including future bays, as shown on the drawings. Bidders are suggested to refer Scope of Works under Part 2: Employer's Requirements Section V – B1 (Project Specific Requirements) for better clarifications. |
| 388. | Section V-B1 (Technical specification) - 220kV GIS 8.7.1 pg 126<br>9.1.12 pg 132<br>*o. 3D Model of GIS general arrangement drawings* | 3D models shall be provided in .iges or .stp format.<br>Please confirm | Please refer response to clarification for S.N. 365. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| 389. | Section V-B1 (Technical specification) - 220kV GIS 9.1.11 pg 132<br>*Temperature rise of current carrying parts shall be limited to the values stipulated in IEC 62271-1, under rated current and the climatic conditions at site. The temperature rise for all enclosures shall not exceed 20 °C above the ambient temperature of 50 °C.* | Temperature rise of current carrying parts shall be as per latest IEC 62271-1 Table 14. Please confirm | Please refer response to clarification for S.N. 366. |
| 390. | Section V-B1 (Technical specification) - 220kV GIS 9.3.6 pg 17<br>*System Switching Transient Study - to determine whether the circuit breakers need to be equipped with pre-insertion resistors.* | For 220kV GIS PIR is not applicable, if require CSD(Controlled Switching Device) shall be offered based on the customer requirement. Kindly clarify which are the bays need to offer with CSD. | Please refer response to clarification for S.N. 367. |
| 391. | Section V-B1 (Technical specification) - 220kV GIS 9.3.7 pg 135 *Ferroresonance study - to determine if interactions between the GIS bus or interconnected cables and wound voltage transformers produce a resonance situation and require the installation of tuned inductors on the voltage transformer secondaries.* | Ferro resonance study is required when GIS CBs are with double interrupter & uses capacitors for voltage distribution. As Offered CBs are with single interrupter design, requirement of damperning device on VT secondaries is not required and hence the study. | Please refer response to clarification for S.N. 368. |
| 392. | Section V-B1 (Technical specification) - 220kV GIS 9.2.13 pg 134<br>12.2.17 pg 155 | Gas density monitoring system shall be with temperature compensated gas density switches with RS485 interface wired up to GIS LCC. | Please refer response to clarification for S.N. 367. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | *A gas density monitoring system (GDM) integrated with existing communication systems including gas density monitors (with alarm contacts), gas density monitoring (GDM with transducers) hardware and software system, pressure relief devices, gas filling connections and Human Machine Interface (HMI).*<br>*The Contractor shall also provide a stand-alone Gas Density Monitoring (GDM) system using SF6 gas density transducers. The GDM shall have RS-485 serial communication with distributed network protocol (DNP) to transmit gas zone and system alarms to the Employer's Human Machine Interface (HMI) system.* | Transducers, hardware and software system, HMI are excluded.<br>Please confirm | |
| 393. | Section V-B1 (Technical specification) - 220kV GIS 12.2.4 pg 152<br>*.....each circuit breaker bay shall have separate independent gas compartments for the circuit breaker, CTs, disconnect switches, maintenance earthing switches, high speed ground switches, voltage transformers, metal-enclosed surge s, cable sealing end enclosures, bus sections, gas-to-air-bushing modules and* | Request kindly to note that in our design CT secondaries are Air insulated.Hence, separate gas compartment is not required / applicable. For 220kV design, as Maintenance earthing switches are combined with disconnectors, all maintenance earthing switches and high speed earthing switches shall be part of disconnector gas compartment.<br>Please confirm | The requirement should be as per the technical specification which shall be finalized during the detailed engineering by the Contractor subject to the approval of Engineer. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | *interface connections for future expansion of the GIS.* | | |
| 394. | Section V-B1 (Technical specification) - 220kV GIS 12.4.5 pg 161 *For Isolating Disconnect Switches and Maintenance Earthing Switches: A minimum of 12 "a" and 12 "b" auxiliary contacts shall be provided for each switch that are field reversible for the Employer's use.* | 4NO+4NC shall be spare auxiliary contacts available for multiplication as required. Kindly note auxiliary contacts are not reversible/adjustable at site due to safety reasons. Please confirm | Please refer response to clarification for S.N. 370. |
| 395. | Section V-B1 (Technical specification) - 220kV GIS 12.6.9 pg 164 *CTs : Shielded cables with a minimum of 6 mm2 stranded copper conductor shall be used for wiring between the current transformer and the LCC.* | 4 sq.mm stranded copper conductor is used for wiring between the CT and the LCC. Please confirm | Please refer response to clarification for S.N. 371 |
| 396. | Section V-B1 (Technical specification) - 220kV GIS 12.10.2 & 12.10.3 pg 167 *The connection shall be equipped with a removable link to permit separation of GIB and GIS for high voltage testing. The Employer's preference is for the GIL removable link to be* | The GIB can be disconnected using outgoing feeder disconnector. Hence the bidder do not recommend removable link. Please confirm | Kindly adhere to the requirement of the Bidding document. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| | *located inside the GIS enclosure for an indoor GIS.* | | |
| 397. | Section V-B1 (Technical specification) - 220kV GIS 12.14.2 pg 171 *All current transformer secondary wiring in the LCC shall be minimum 6 mm2 stranded copper and all other wiring except for instrumentation shall be a minimum 2.5 mm2* | Wiring of CT shall be with 4 sq.mm copper wires and control wiring shall be with 1.5 sq.mm copperp wires. Please confirm | Please refer response to clarification for S.N. 371 |
| 398. | Section V-B1 (Technical specification) - 220kV GIS 12.18.1 pg 174 *The GIS shall be provided with capacitive voltage couplers, with provisions for the attachment of a voltage measuring device for diagnostic monitoring and ultra-high-frequency partial discharge (PD) measurement* | UHF sensors shall be provided for PD monitoring. On-line PD monitoring system can measure and monitor PD in GIS with expert system software for diagnosis. Capacitive voltage couplers are not provided for voltage measurement as all outgoing feeders are with Voltage transformer. Please confirm | Please refer response to clarification for S.N. 374 |
| 399. | Section V-B1 (Technical specification) - 220kV GIS 12.24.1 pg 181 *The Contractor shall provide DVD videos which provide an overview of the operation and maintenance of the GIS equipment provided for the project.* | Hard copy and soft copy of detailed Operation and maintenance manuals shall be provided to customer during Engineering.<br><br>Please confirm | Kindly adhere to the requirement of bid. |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| 400. | Section V-B1 (Technical specification) - 220kV GIS 1. pg 209 *Three-phase sets of gas insulated bus (GIB) to two (2) three-phase sets of transformer gas-to-air bushing termination modules including all GIB supporting structures.* | The bidder understands for one three phase sets of GIB require one three phase set of bushing. Hence please clarify two (2) three phase sets of transformer gas-to-air bushing termination modules. | To be reviewed and approved by the Engineer at project execution stage |
| 401. | Section V-B1 (Technical specification) - 220kV GIS 1. pg 209<br>*Each LCC shall be furnished with a local/remote switch to block or allow local control through the HMI screen.* | LCC is of conventional type and will not have any HMI screen.<br><br>Please confirm | Kindly adhere to the requirement of bid. |
| 402. | Section V-B1 (Technical specification) - 220kV GIS 1. pg 209<br>*Gas Density Monitoring (GDM) equipment for each gas zone with Human Machine Interface (HMI).* | GDM shall be with temperature compensated gas density switches with RS485 ports wired up to LCC. There will not be any HMI in LCC. Please confirm. | Please refer response to clarification for S.N. 375. |
| 403. | Section V-B1 (Technical specification) - 220kV GIS 2 pg 210<br>*System X/R (maximum) X/R = TBD (shall be finalized after study report)* | Please provide the X/R ratio value. | Please refer response to clarification for S.N. 376 |
| 404. | Section V-B1 (Technical specification) - 220kV GIS 2 e) pg 214<br>*GIS CT : Mechanical design - Indoor class, temp range -30 to +50°C* | Temperature range shall be -20 to +50 deg C. Please confirm | Please refer response to clarification for S.N. 377 |

| SN | Reference to the Bidding Document | Questions from Bidders | Response of Millennium Challenge Account Nepal (MCA-Nepal) |
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| 405. | Section V-B1 (Technical specification) - 220kV GIS 2 f) pg 214<br>*GIS VT: Accuracy class 0.3WXYZ* | Please clarify the accuracy class for VTs. | Please refer response to clarification for S.N. 379 |
| 406. | Section III. Qualification and Evaluation Criteria.<br>D. Technical Evaluation Criteria for each Lot<br>*Key professional personnel qualification* | The bidder understands design engineers are not resident engineers and can operate from remote work place. Please confirm | The deputation of the Design Engineer can be site based as well as remote based depending on the requirements of the project. |
| 407. | Section III. Qualification and Evaluation Criteria.<br>D. Technical Evaluation Criteria for each Lot<br>*2. Approach, Methodology and Work Plan,*<br>*2.2 Proposed design work plan as per TECH-4 and*<br>*Employer's Requirement* | The design work plan has been sought as per TECH-4 and employer's requirement. However, TECH-4 mainly demonstrates Work program. Hence, please provide details of requirements for Design Work Plan. | Bidders are required to prepare the proposal meeting the minimum requirements of the bid. Bidders are suggested to prepare the bid considering the same and receive advantages by submitting a techno feasible offer.<br><br>Your approach and methodology should be in line with your proposed work plan. |
| 408. | Section III. Qualification and Evaluation Criteria.<br>D. Technical Evaluation Criteria for each Lot<br>*1. Organizational Capability and Experience of the*<br>*Contractor within last 10 Years*<br><br>*Key professional personnel qualification* | The Bidder understands that 40% of technical weightage has been given to Key professional personnel qualifications and only 20% of technical weightage is given to Organizational Capability and Experience.<br><br>The bidder believes that to execute the projects of such high criticality level, organizational capability & experience should be weighted more than the professional personnel qualification. Hence, the bidder requests us to increase the weightage of organizational capability & | The requirement of the bid document will not be amended. |

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| | | experience and reduce the weightage of professional personnel qualifications. | |