.N	Substation	Vol	Chapter	Clause	nstallation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and Ass Bidder's Queries	MEAL D.
					As per the site visit, we understand that 1 no. of 33 kV Transmission line is passing through the	NEA's Reponse
1	Camman	O:4-			proposed Land. We understand that, any type of electrical, Civil work related to rerouting,	
1	Common	Site			dismantling of 33 kV Transmission line is excluded from the Bidder's scope of work. Please	As per the provision of the bidding document.
	·				confirm.	
					We understand that NEA will issue necessary Statutory permission from Army for Blasting work	
2	Common	Site			for both Khudi & Manang Substation & approach road including Transmission Line area. Please	The project will conding to fourth
					confirm.	The project will coordinate for the permission
					We understand that Tree Cutting required for construction of substations at the proposed area at	
3	Common	Site		-	Khudi & Manang Substation, construction of approach road & transmission line is in NEA scope.	Tree cutting is in the Employer's scope
		-			Please confirm.	Tree cutting is in the Employer's scope
4	Common	Vol-I	Sec-1	Cl-34.1 (b)	We will supply spares parts as per list and quantity given in the price schedule only. No other	
'					spares shall be in our scope. Please confirm.	As per the provision of the bidding document.
5	Common	Vol-I	Sec-2	Cl-4.9	Please specify the format or content of the Declaration of Undertaking.	Bidder is to submit as per their own format.
					Contracts of Similar Size and Nature	Brader is to submit as per their own format.
					Please confirm the following:	
			,		(a) whether the Bidder, who wants to participate and qualify as a Joint Venture, have to meet both	· ·
					the requirements mentioned against column "All Partners Combined" and "Each Partner" or it is	
					sufficient to meet only the requirements against column "All Partners Combined".	
6	Common	Vol-I	Sec-3	Cl-2.4.1	(b) In case of a joint venture Bid with more than two partners, please confirm the qualification	Please refer Amendment-I.
					requirement of "Each Partner" and "All Partners Combined".	Trease refer Amendment-1.
					(c) In case of a joint venture Bid with more than two partners, please confirm that requirement of	
				,	"Out of two (2) transmission line and substation contracts, one (1) Contract of Transmission line	
-					and one (1) contract of substation must have been executed outside the bidders Home Country"	
				•	shall have to be met by any one of the JV Partner only.	
					Each Partner must have successfully or Substantially completed one (1) contract of 220 kV or	
				-	higher voltage class Double circuit transmission line with bundled conductor of minimum line	
.					length of 46 km including design, supply, installation, testing and commissioning and each	
l					contract worth more than US\$ 14 Million, plus one (1) contract of 220 kV or above voltage class	
ı					GIS substations including design, supply, installation, testing and commissioning and each	•
7	Common	Vol-I	Sec-3	Cl-2.4.1	contract worth more than US\$ 36 Million. All above contracts must have been completed or	Please refer Amendment-I.
					substantially completed within last 7 years	7 Information 1.
					We understand Compliance Requirement in case Joint Venture for each partner should be Not	
					Applicable. Because This "Each Partner" compliance requirement is repeated from optional	
					requirement of All partners combined.	
					Request you to please amend this clause accordingly.	
8	Common	Vol-I	Sec-6	Cl-7	Please specify the format or content of the Commitment Letter.	Bidder is to submit as per their own format.

Project Manager



S.N	Substation	Vol	Chapter	Clause	nstallation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and Ass	sociated Substations at Khudi & Manang
	Substation	¥01	Chapter	Clause	bluder's Ouerles	NEA's Reponse
9	Common	Vol-I	Sec-7	Cl-10.2	We understand that in the event of delay in handover of Site and delay by Employer under GCC Clause 10, we would be entitled to claim extension of time with costs under Clause 40 of the GCC. Please confirm.	As per the provision of the bidding document.
10	Common	Vol-I	Sec-7	Cl-24	As soon as reasonably practicable after the operating and maintenance personnel have been supplied by the Employer and the raw materials, utilities, lubricants, chemicals, catalysts, facilities, services, and other matters have been provided by the Employer in accordance with GCC Sub clause 24.2, the Contractor shall commence Pre-commissioning of the Facilities or the relevant part thereof in preparation for Commissioning, subject to GCC Sub clause 25.5. We understand that Contractor would be entitled to extension of time in for any delay due to the Employer.	As per the provision of the bidding document.
11	Common	Vol-I	Sec-7	Cl-27.8	If the Facilities or any part thereof cannot be used by reason of such defect and/or making good of such defect, the Defect Liability Period of the Facilities or such part, as the case may be, shall be extended by a period equal to the period during which the Facilities or such part cannot be used by the Employer because of any of the aforesaid reasons. We request that warranty for replaced items shall have a cut-off date beyond which all obligations of Contractor for warranty shall cease to exist. The existing clause may result in evergreen warranty obligations for contractor.	As per the provision of the bidding document.
.12	Common	Vol-I	Sec-7	Cl-34.1 (b)	Covering physical loss or damage to the Facilities at the Site, occurring prior to Completion of the Facilities, with an extended maintenance coverage for the Contractor's liability in respect of any loss or damage occurring during the Defect Liability Period while the Contractor is on the Site for the purpose of performing its obligations during the Defect Liability Period. As upon completion of switchyard all the installation activities shall be over and considering the same we propose that Installation all risks insurance will be effective till TOC, beyond that it should be covered under client's property insurance. Please confirm.	As per the provision of the bidding document.
13	Common	Vol-I	Sec-7	Cl-34.1 (c)	the Employer's personnel, and loss of or damage to property occurring in connection with the supply and installation of the Facilities.	As per the provision of the bidding document.
14	Common	Vol-I	Sec-7	Cl-34.5	The Employer shall at its expense take out and maintain in effect during the performance of the Contract those insurances specified in the Appendix (Insurance Requirements) to the Contract Agreement, in the sums and with the deductibles and other conditions specified in the said Appendix. Please specify the amount of deductibles.	As per the provision of the bidding document.



2.11	Substation	Vol	Chapter	Clause	Installation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and Ass Bidder's Queries		NEA's Reponse
15	Common	Vol-I	Sec-7 & 8	Cl-7.3	The Contractor agrees to supply spare parts for a period of years: 5 Years. The Contractor shall carry sufficient inventories to ensure an ex stock supply of consumable spares for the Plant. Other spare parts and components shall be supplied as promptly as possible, but at the most within 6 months of placing the order and opening the letter of credit. In addition, in the event of termination of the production of spare parts, advance notification will be made to the Employer of the pending termination, with sufficient time to permit the Employer to procure the needed requirement. Following such termination, the Contractor will furnish to the extent possible and at no cost to the Employer the blueprints, drawings and specifications of the spare parts, if requested. (i) Bidder will ensure to keep the availability of mandatory spares parts. However, we understand that time duration to do so needs to be practically feasible. Technology is continuously evolving and maintaining spares inventory for such a long period is not practical. Requesting NEA to change period from five years to 1 year. Ii) With respect to the requirement of sharing all drawing and technical information of spares — We can only share non-proprietary drawings. We can provide alternate source for the spares or provide the spares from another factory.	As per the	provision of the bidding document.
16	Common	Vol-I	Sec-9 Appendi x 3(A)		In accordance with the provisions of GCC Clause 34, the Contractor shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurances set forth below in the sums and with the deductibles and other conditions specified. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, such approval not to be unreasonably withheld. In accordance with the provisions of GCC Clause 34, the Contractor shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurances set forth below in the sums and with the deductibles and other conditions specified. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, such approval not to be unreasonably withheld.	As per the	provision of the bidding document
17	Common	Vol-I	Sec-9 Appendi x 3(A).a		(*) Excess 5% of claimed amount subject to minimum of NRs. 20,000 or its equivalent for Normal and NRs. 80,000 or its equivalent for act of God perils and collapse. We request NEA to	As per the	provision of the bidding document
.8	Common	Vol-I	Sec-9 Appendi x 3(A).b		(*) Excess 5% of claimed amount subject to minimum of NRs. 10,000 or its equivalent for Normal and NRs. 30,000 or its equivalent for testing period. We request NEA to delete the foot note: (*) Excess 5% of claimed amount subject to minimum of NRs. 10,000 or its equivalent for Normal and NRs. 30,000 or its equivalent for testing period	As per the	provision of the bidding document

Maxa. Project Manager

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C NI	Substation	ent of r	lant, Desig	gn, Supply, I	nstallation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and As	sociated Substations at Khudi & Manang
5.N	Substation	Vol	Chapter	Clause	Bidder's Queries	NEA's Reponse
19	Common	Vol-I	Sec-9 Appendi x 3(A).b		Installation All Risks Insurance Covering physical loss or damage to the Facilities at the Site, occurring prior to completion of the Facilities, with an extended maintenance coverage for the Contractor's liability in respect of any loss or damage occurring during the defect liability period while the Contractor is on the Site for the purpose of performing its obligations during the defect liability period As upon completion of switchyard all the installation activities shall be over and considering the same we propose that Installation all risks insurance will be effective till TOC, beyond that it should be covered under client's property insurance. Please confirm.	As per the provision of the bidding document.
20	Common	Vol-I	Sec-3	Cl-7	We understand that one no. of HTLS expert/supervisor need to be deployed during stringing of HTLS conductor, who need not to be from core manufacturer / conductor manufacturer. Please confirm if our understanding is correct.	No, the HTLS conductor shall be strung in the supervision of expert from the both HTLS Conductor manufacturer and the Core manufacturer.
21	Common	Vol-II Part A	Sec-4		Design standards and requirements: Given the fact that the Indian design standards are listed in the bidding documents, please clarify specifications of the iron tower and foundation load calculation, the specification of the tower design and the international standards corresponding to the basic design specifications	As per the provision of the bidding document.
22	Common	Vol-II Part A	Sec-4		Information on types of retaining walls and the slope protection types as well as materials to be used (such as block stone, concrete)	As per the provision of the bidding document.
23	Common	Vol-II Part A	Sec-4		Is there any destructive test requirement on the tower? If yes, any special requirements? please verify the local foundation steel strength grade and processing level, and whether the steel bars can be purchased locally	As per the provision of the bidding document.
24	Common	Vol-II Part A	Sec-4		On project scope: It is mentioned in the tender documents that single-circuit, double-circuit and multi-circuit towers are available, but only the working scope of double-circuit line is stated. Please clarify whether this project includes single-circuit and multi-circuit lines. If yes, please state the working scope and its requirements in this part, such as the locations of the substations at both ends and the position (coordinates) of incomer bay, line voltage class, circuit numbers, conductors splitting numbers, conductor cross section, the ground wire and OPGW model, and other technical requirements, etc.	As per the provision of the bidding document Requested details shall be provided/ finalized during detail engineering.
25	Common	Vol-II Part A	Sec-4		Please clarify the height and time intervals of the maximum design wind speed at 47m/s in the tender documents.	The maximum design wind speed at 47m/s is applicable at 10 m height over a short time interval of 3 seconds.
26	Common	Vol-II Part A	Sec-4		Please collect the local anticorrosion requirements on iron towers, foundations, conductors and ground wires, earthing and fittings	As per the provision of the bidding document.
27	Common	Vol-II Part A	Sec-4	·	Please provide us the design drawings of the transmission lines mentioned in the tender documents, such as iron tower drawings	Detail Foundation design and tower design shall be provided to the Contractor during execution for DB, DC, and DD. However, DD special and MD tower with ACSR Moose has to be designed by the contractor.



3.11	Substation	Vol	Chapter	Clause	nstallation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and As Bidder's Queries	NEA's Reponse
28	Common	Vol-II Part A	Sec-4		Should the transmission lines crossing over the HV lines be designed in live crossing? and in such case, can the line crossed over be powered off or not? How to calculate the cross-over cost and power loss cost, and the cost of modifying and relocating the weak-current lines.	Required shut down and relocating of existing low voltage line shall be arranged by the NEA/Project if necessary.
29	Common	Vol-II Part A	Sec-4		The design requirements of the double-circuit tension towers are mentioned in the tender documents. Please clarify the design requirements of the double-circuit straight tower	No suspension tower is envisaged in this scope.
30	Common	Vol-II Part A	Sec-4		The minimum safe distances crossing over railways, highways, power lines, communication lines, rivers and plantations, etc., any special requirements?	As per the provision of the bidding document.
31	Common	Vol-II Part A	Sec-4		The principle for treating the residual soil of the foundations and what about the local environmental protection policy concerned	The principle for treating the residual soil of the foundations is as per Clause 4, Chapter-14, Part B of Volume II of the Bidding document. EIA report shall be provided to the Contractor during execution.
32	Common	Vol-II Part A	Sec-5A		The bidding documents mentioned that the HTLS wire is required for this project. Please clarify whether there are specific model requirements. Is there any type of wire used in similar projects in the same area in Nepal?	Bidder is to propose the conductor as per Section V-A, Volume-II, Part A of the Bidding documents
33	Common	Vol-II Part A	Sec-7		Only the minimum creepage distance of composite insulators is given in the bidding documents. Please clarify the pollution level of the project area, and whether there are other insulation coordination requirements	As per the provision of the bidding document.
34	Common	Vol-II Part B			Bidder proposes the bus protection integration for circuit breaker failure protection. Please confirm.	Bidder is to comply requirement of bidding documents.
35	- 1	Vol-II Part A	Sec-1	Cl-1.1.1	We understand FOTE equipment connectivity is to be provided for following links Manang- Khudi - Approx. 30 Km Khudi - Udipur- Approx. 15 Km Please confirm our understanding.	Manang- Khudi -Approx. 30 Km Khudi - Udipur- Approx. 16 Km
36	Common	Vol-II Part A	Sec-4	Cl-1.2.1	IS Steel Sections of tested quality of conformity with IS:2062:2011 grade E250 (Designated Yield Strength. 250 MPa) and/ or grade E350 (Designated Yield Strength 350 MPa) are to be used in towers, extensions, stubs and stub setting templates. For Snow Zone towers MS & HT Steel Sections shall conform to E250 Grade-C & E350 Grade-C respectively Whether the entire quantity of Tower Materials of BPS shall be supplied for Grade -C sections. If no, Please provide us the quantity of Tower Materials required to be supplied with Grade-C section.	Bidder is advised to assess the required proportion of Steel Grade as per site assessment/climatic condition/as per the provision of the Bidding document.
37	Common I	Vol-II Part A	Sec-4	Cl-2.4	In 2.4.2 it is given that clearance between chimney concrete level and ground level shall be 225mm. But based on requirement it shall be 500mm. Please confirm the exact requirement. Also other parameters like FOS to be considered, PCC depth, Min chimney dimension and clearance, soil parameters were not provided. Please update	As per the Provision of the Bidding document.





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2.14	Substation	VOI	Chapter	Clause	nstallation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and Ass Bidder's Queries	1	Ties at Kildul & Mallally
38	Common	Vol-II Part A	Sec-5A	Cl-1.10.1	Kindly Refer Technical Data Sheet where required rated voltage of Circuit Breaker is given as 245kV & 145kV for 220kV & 132kV system respectively. However in Price schedule No. 1 Item no. D 4 F 1.1 is given as 72.5kV, 1250A, 31.5kA Circuit breaker (3-phase) with support structure. Kindly amend price schedule accordingly.		NEA's Reponse equipment shall be used for tertiary Bidder is to quote as per BPS
39	Common	Vol-II Part A	Sec-7 & Sec-1	Cl-1.1.4 & Cl-3.3	The technical data for Composite Insulators of mechanical strength 120kN, given in file named "Composite Insulator specification" (given on Page no.1 of 16) and "Service Condition" are different. The core dia. Of Insulator is given as 24 mm and Creepage is given as 5040 mm & 5355 mm whereas in the "Service condition" the same values are given as 20 mm and 7595 mm respectively. Please confirm which one correct. Request you to please release amendment accordingly	Informati	l parameter mentioned in General on and Scope shall prevail i.e. e insulator of 20 mm dia with creepage nm.
10	Common	Vol-II Part A	Sec-13		We have received details of various types of transmission tower with the referred survey report. Further, we understand that, any change of tower type / route / quantity of tower, which may impact overall structure, civil work and electrical equipment quantities, will be paid at actual. Please confirm.	As per the	e Provision of the Bidding document.
11	Common	Vol-II Part A	Sec-13		We understand that, NEA will provide encumbrance free Land, including route without any ROW issue to successful Bidder for 220 kV D/C Transmission Line.	As per the	e Provision of the Bidding document.
12	Manang & Khudi	Vol-II Part B	Chap-1	3.2.1.1.4.(y)	This, and the term for the same in price schedule.	132 kV. as upto ou module) a	For respective module description for cable cellar is not required for 132kV atside wall GIS duct (part of respective considered. In 33 KV suitable ble trenches shall be considered.
13	Common	Vol-II Part B	Chap-1		Bodging, Local Conveyance, Dany Allowance etc. Will be in scope of customer only	As per the	Provision of the Bidding document.
4	Common	Vol-II Part B	Chap-1	Cl-12.4	Augmentation and integration work related to SCADA System: As per clarification received for earlier tender New bays/ stations can not be integrated with existing Control Centre System due to un-availability of hardware (101 receiver module). Also, replacement of existing system with new	Bidder is t	to quote as per the provision of the ocument.
.5		Vol-II Part B	Chap-1	Cl-3.1.2	clarify that need to consider in our offer	MV side f BPS in 22	ner Protection Panel (For both HV & or 220/132kV ICT) is mentioned in 0 kV protection. Which clearly include. 132 kV side scope also.
6		Vol-II Part B	Chap-1	Cl-3.1.2 & 3	Protection panel of bus coupler bay is not envisaged in price schedule	Bidder is t	to quote as per provision of bidding



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3.11	Substation	VOI	Chapter	Clause	nstallation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and As Bidder's Queries	NEAL B
47	Common	Vol-II Part B	Chap-1	Cl-3.1.2 & 3	Two Names CD CD	NEA's Reponse Bidder is to quote as per BPS. In BPS two number of Transformer bay modules are considered for 220 kV, 132 kV at each substation.
48	Manang	Vol-II Part B	Chap-1	3.2.1.1.4(1)	kindly clarify the requirement of jockey pump to arrest the minor leakages & also confirm the requirement of standby pump (if required)	As per the provision of the Bidding document, please refer Clause 2.05.00 and Clause 2.06.04 Chapter 8, Part B, Vol-II of the Bidding document. Jockey pump and stand by pump are required a per the provision of the Bidding document.
49	Manang	Vol-II Part B Vol-II	Chap-1	Cl- 3.2.1.1.4(i)	We are considering only one (1) diesel engine driven pump of 96 CMH. We are not considering any jockey pump as the same is not mentioned. Please confirm.	Bidder shall include jockey pump as per the provision of the Bidding document.
50	Manang	Part B	Chap-1	3.2.1.1.4(p)	We are not considering ventilation system for 33kV GIS building. Please confirm.	As per the provision of the Bidding document.
51	Manang & Khudi	Vol-II Part B	Chap-1	& 3.2.2.2.(y)	As per referred clause, 132kV & 33kV GIS module shall be terminated by XLPE Cable from transformer & line take off side. Please clarify, whether cable cellar is provided for 132kV & 33kV GIS buildings. If so, whether it will be provided in underground or above ground. Please confirm. Also, add the item for the same in price schedule.	Please refer respective module description for 132 kV. cable cellar is not required for 132kV as upto outside wall GIS duct (part of respective module) are considered. In 33 KV suitable cab trenches shall be considered.
52	Manang	Vol-II Part B	Chap-1	Cl- 3.2.1.1.5(a)	We are not considering EOT crane for 33kV GIS Building. Please confirm.	As per the provision of the Bidding document.
53	Common	Vol-II Part B	Chap-1	3.2.1.1.5.(q)	As per referred clause, site leveling is in bidder scope. Please clarify, whether the site leveling is to be done only in present+ future bays of 220/132/33kV area along with township area and the remaining untouched area within property line (i.e.; boundary wall) to be left as it is. or The entire site area within the property line to be leveled.	Bidder is to quote as per the BPS and the provision of the Bidding document
4	Manang	Vol-II Part B	Chap-1	Cl-3.2.2 (PDF Page no.21)	In specification all parameters mentioned are corresponding as applicable for "altitude less than 1000 Mtrs. MSL". However at Manang substation for all equipment's (including transformer), all design parameters including air clearances, external insulation etc. shall be corresponding to altitude of 2400 Mtrs. from MSL in (accordance to IEC). Necessary correction corresponding to altitude of 2400 Mtrs is required to apply in all design parameters of all equipment's/ material etc. and bidder is to quote accordingly. Please confirm that altitude correction factor shall be applied on creepage distance or not.	Please assume necessary correction factor for Manang substation as per IEC.
5		Vol-II Part B	Chap-1	C1-3222	Details of remote end Differential relays are required to match for Khudi -Manang & Khudi - Mayasangdi Lines. Also, confirm the Line length to propose the suitable relay.	The line length is given in the bid document.
6	Common	Vol-II Part B	Chap-1		Kindly confirm remote end relay to be supplied as loose or with panel.	Bidder is to quote as per provision of bidding documents.
7	L'Ommon I	Vol-II Part B	Chap-1	Cl-3.2.2.2	Supply of Digital Protection Coupler (DPCs) & Communication equipments are not in our Scope	Bidder is required to comply requirement mentioned in bidding documents.



<u> </u>	Substation		Chapter	Clause	nstallation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and Ass Bidder's Queries	NEST D
58	Khudi	Vol-II Part B	Chap-1	Cl-3.2.2.2(i)	We are considering only one (1) diesel engine driven pump of 96 CMH. We are not considering any jockey pump as the same is not mentioned. Please confirm.	As per the provision of the Bidding document.
59	Khudi	Vol-II Part B	Chap-1	Cl-3.2.2.2(j) (PDF Page	LT Transformers and associated equipment: -630 kVA, 33/0.400kV, LT Transformer with associated 36kV HG fuse, Isolators, Bus Post Insulators, conductor, clamps, connectors etc. complete in all respect for LT transfer bay (one LT transformer is to be fed from 33 kV GIS LT transformer bay and one LT transformer is to be fed from 33 kV external supply). Please specify the Contractor scope of work	The external supply here means tertiary of the 220/132/33 kV transformer.
60	Khudi	Vol-II Part B	Chap-1	Cl-3.2.2.2(p)	We are not considering ventilation system for 33kV GIS building. Please confirm.	As per the provision of the Bidding document.
61	Khudi	Vol-II Part B	Chap-1	(PDF Page	Earth mat design & laying inside the GIS buildings and in the outdoor yard is in the scope of Contractor Please note that we understand earth mat design is for present scope only excluding future scope.	No, your understanding is incorrect. Earth mat design is for present scope as well as future scope also.
62	Khudi	Vol-II Part B	Chap-1	no.29)	For 220 kV Khudi- Marsyangdi Double circuit line (at Khudi end), line current differential relay matching with Marsyangdi end are covered in other contract. However necessary coordination and integration is under present scope of work. We understand that Marsyangdi substation is existing. Hence we need the existing differential relay (type and make)information at Marsyangdi end for matching with the line differential relay at our line bay scope(Khudi S/S). Please provide the same.	Udipur Substation is being constructed. Hence the same shall be provided during detail engineering.
63	Khudi	Vol-II Part B	Chap-1	(PDF Page no.29)	For 220 kV Khudi-Manang Double circuit line, line current differential relay matching with both end are to be considered in respective panels at each substation. We understand that both substation (Khudi-and Manang) are under present work of scope and connected with each other via 220 kV Khudi-Manang Double circuit line. Hence same differential relay shall be supplied at both end. As per present scope. Please confirm our understanding.	Bidder's understanding is generally in order.
64	Khudi	Vol-II Part B	Chap-1	Cl-3.2.2.3(a)	We are not considering EOT crane for 33kV GIS Building. Please confirm.	As per the provision of the Bidding document.
55	Manang	Vol-II Part B	Chap-1	C1-5.2	Since the Minimum temperature has been mentioned as (-) 10 deg C, We request you to information for Snow accumulation to be consider at design stage. Pls confirm.	Please refer clause number 3.3 of Chapter PSR
56	Khudi	Vol-II Part B	Chap-1	CI-3.2	Since the Minimum temperature has been mentioned as (-) 5 deg C, We request you to information for Snow accumulation to be consider at design stage. Pls confirm.	Please refer clause number 3.3 of Chapter PSR
57	Manang & Khudi	Vol-II Part B	Chap-1	3.3.3.1.1 g)	245kV,40kA for 1second, SF6 gas-insulated metal enclosed Bus Section bay module Please note that Bus Section Bay is not mentioned in BOQ & SLD under present scope of work. Please confirm the actual requirement & amend the price schedule.	Bidder is to quote as per BPS.





S.N	Substation	Vol	Chapter	Clause	nstallation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and As	sociated Substations at Khudi & Manang
			Gilapter	Cidase	bidder's Queries	NEA's Reponse
68	Common	Vol-II Part B	Chap-1		Super-imposed loads in different areas shall include live loads, loads from stored material etc. 1) Non-accessible Roof - 0.75 kN/m2 2) Accessible Roof - 150 kN/m2 The data for accessible roof is excessively high according to our experience. Please clarify it.	Bidder is to consider the value of Super-imposed loads including live loads, loads from stored material etc. for Accessible Roof as 1.5 kN/m2 as per Clause No. 13, Chapter 14, Part B of Volume-II of the Bidding document.
69	Common	Vol-II Part B	Chap-1		We presume that there is no PMU requirement since there is no separate line item in BPS as well Section-Project specific requirements (PSR).	Bidders understanding is generally in order.
70	Khudi	Vol-II Part B	Chap-12		The outdoor equipment of the substation and the substation building shall be protected against lightning We assume that 400kV GIS,132kV GIS ,33kV GIS and control building along with the outdoor equipment shall be protected against lighting. Please confirm.	As per the provision of the Bidding document.
71	Khudi	Vol-II Part B	Chap-14		Roof of the Building shall be sloping type made of steel tubular truss and 0.63 mm thick CGI sheet. All necessary hooks, J bolts, washers and nuts etc. required to fix CGI sheet with truss shall be provided. The roof shall be leak proof and holes shall be properly sealed. The truss may be fixed with RCC tie beam and column with MS plate and bolts properly grouted. Plate and bolts properly grouted. Structural steel for roof truss payable separately or included in item	No, your understanding is not correct. The structural steel is not separately payable. It shall be included in the respective items of BPS as per technical specifications.
72	Common	Vol-II Part B	Chap-14		Please specify the design scope of well and pump.	Design of the well and pump is included in the scope of the Contractor.
73	Common	Vol-II Part B	Chap-14	Cl-31	Major British standard Codes for civil work have been given in the following list. This list is illustrative but not exhaustive. However, for design and engineering relevant BS codes or equivalent International standards shall be referred by the contractor. Relevant portion of BS codes or equivalent international standards referred by the contractor for the design shall be made available to NEA/Consultant if necessary during detailed engineering stage. Please clarify whether we can use Indian standard for design.	Bidder can use the Indian standard if it is equivalent or superior than the specified standard in the Bidding document.
74	Common	Vol-II Part B	Chap-14		All approach road to substation (Bituminous/Asphalt) roads shall be of 5.5 m wide black top road with 3.75 m wide black top pavement and 3.1m wide cement paver block shoulders on either side of road, WMB (Water bound macadam) as per design below the pavement shall be designed. In asphalt road of 5.5m, 3.5m wide black top and 3.1m cement paver on either side is not clear. Kindly clarify.	Please refer Amendment-I.
75	Common 1	Vol-II Part B	Chap-14,	Cl-21.1.1	Primary members fabricated from plates and sections with minimum yield strength of 345Mpa or to suit design by continuous double side welding Shall we use Indian section with yield strength of 350Mpa?	Indian section with yield strength of 350Mpa can be used.

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S.N	Substation	Vol	Chapter	Clause	nstallation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and As	sociated Substations at Khudi & Manang
				5.000	biquei s Oueries	NEA's Reponse
76	Manang	Vol-II Part B	Chap-15	Cl-18.7	Auto reclose relay function if offered as an integral part of line distance protection relay, shall be acceptable for 132 kV lines only provided the auto reclose relay feature meets the technical requirements as specified in the respective clause. We are considering auto reclose relay function as as an integral part of line distance protection relay for 132kV. We are not considering any separate panel for 132kV CB relay panel with auto reclose. Also, please note that quantity of 132kV CB relay panel with auto reclose are not mentioned in BPS. Please confirm our understanding is correct.	Bidder is to quote as per BPS.
77	Khudi	Vol-II Part B	Chap-15	Cl-18.7	Auto reclose relay function if offered as an integral part of line distance protection relay, shall be acceptable for 132 kV lines only provided the auto reclose relay feature meets the technical requirements as specified in the respective clause We are considering auto reclose relay function as as an integral part of line distance protection relay for 132kV. We are not considering any separate panel for 132kV CB relay panel with auto reclose. Also, please note that quantity of 132kV CB relay panel with auto reclose are not mentioned in BPS. Please confirm our understanding.	Bidder is to quote as per BPS.
78	Common	Vol-II Part B	Chap-15	Cl-26	Kindly confirm whether Low impedance centralised busbar is acceptable for the 220kV System	Bidder is to quote as per provision of bidding
79	Common	Vol-II Part B	Chap-15	CI-26.2(n)	As per specification Separate Busbar to be provided for each side of bus-section. Our bus bar protection relay is able to cover 6 zones. Kindly confirm whether can we propose SINGLE BUSBAR UNIT for complete busbar bar.	Bidder is to quote as per provision of bidding documents.
80	Common	Vol-II Part B	Chap-15	Cl-26.3	Vindly confirm I DD	Bidder is to quote as per provision of bidding documents.
81	Manang & Khudi	Vol-II Part B	Chap-15	Cl_31_1	2 nos. Test plugs for using with modular type relays (if applicable) 2 nos. Test plugs for using with modular type relays (if applicable) Please note that as per BPS, 1set relay test tool kit is required. However, 3 sets Relay tools kits are required as per technical specification. Please confirm the appropriate qty.	Relay Test tool kit mentioned in BPS is corresponding to RELAY TEST KIT in specificatio. Therefore 1 set of Relay Test tool kit shall comprise of the following equipment a detailed here under 3 sets Relay tools kits 2 nos. Test plugs for TTB 2 nos. Test plugs for using with modu—lar type relays (if applicable)
82	Common	Vol-II Part B	Chap-15		As it mentions in the bid in the chapter 15 "Auto reclose relay function if offered as an integral part of line distance protection relay, shall be acceptable for 132 kV lines only provided the auto reclose relay feature meets the technical requirements as specified in the respective clause", do other voltage level lines need auto reclose relay feature or not?	Bidder is to quote as per BPS.
83	Common	Vol-II Part B	Chap-17		33kV or below voltage level is not in our scope of supply. If Yes Does integration of 33kV in SAS	Integration of 33 kV in SAS system is also under the scope of the Bid

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<u> S.N</u>	Substation	Vol	Chapter	Clause	nstallation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and Ass Bidder's Queries	sociated Substations at Knudi & Manang				
					The fibre optic network shall be based on the Synchronous Digital Hierarchy (SDH)having bit rate	NEA's Reponse				
84	Manang &	Vol-II	GI 10		of STM-4 (upto 3 MSP protected directions) as identified in the BoQ					
0 4	Khudi	Part B	Chap-18	Cl-2.2	Please note that as per Appendix A, Minimum No. of protected (MSP) directions is 2. However	Bidder is to quote as per BPS.				
					same is 3 nos. as per specification. Please confirm the appropriate nos. of MSP.	as per Br S.				
					The fibre ontic network shall be based on the Samelana District ANY					
~ ~	Manang &	Vol-II			The fibre optic network shall be based on the Synchronous Digital Hierarchy (SDH)having bit rate of STM-4 (upto 3 MSP protected directions) as indentified in the BoQ					
85	Khudi	Part B	Chap-18	8 Cl-2.2	Please note that as ner Annordiy A. Minimum N. J. C. J. J. C. St.	Bidder is to quote as per provision of bidding				
					Please note that as per Appendix A, Minimum No. of protected (MSP) directions is 2. However	documents.				
					same is 3 nos. as per specification. Please confirm the appropriate nos. of MSP.					
		Vol-II			The fibre optic network shall be based on the Synchronous Digital Hierarchy (SDH)having bit rate					
86	Khudi	Part B	Chap-18	Chap-18 Cl-2.2	of STM-4 (upto 3 MSP protected directions) as indentified in the BoQ	Bidder is to quote as per provision of bidding documents.				
		rantb			i lease note that as per Appendix A, Minimum No. of protected (MSP) directions is 2. However					
					same is 3 nos. as per specification. Please confirm the appropriate nos. of MSP.					
	Manang &	Vol-II		C1-2.3.1.1	At present the equipment shall be equipped with a 1 nos., min.16 E-1 port electrical tributary cards					
87		Part B	Chap-18		& two no., min.4 port Ethernet interface card as tributaries.	Bidders is to quote as per BPS.				
	Kiluul	Tarib		(SDH ADM)	Please note that as per BPS, 2 nos. E1 Interface card is required. However, 1 nos. E1 interface					
					card is required as per technical specification. Please confirm the appropriate qty.					
	-				Normal Variation Frequency Phase Neutral Voltage in Voltage in HZ /Wire					
					connection					
88	Manang &	Vol-II	Chan 10	Cl 15 1	400V +/- 10% 50 +/- 5% 3/ Solidly 4 Wire Earthed.230V +/- 10% 50 +/- 5% 1/ Solidly 2 Wire					
86	Khudi	Part B	Chap-19	Cnap-19	CI-13.1	rined.	Chapter 2 General Technical Requirement sha			
					2.5%. However same is written as +/- 5% in chapter 19. Please confirm the correct frequency					
_					variation for 230V.					
					The criteria for Transformer losses shall be "Copper Loss (Load Loss) > Iron Loss(No Load Loss)	Bidder is to quote the No load loss, Load Loss				
89	Khudi	Vol-II	Chap-19	Cl-6.1.1	Cooler Loss (Auxiliary Loss)".	and Loss associated with cooling fan of the				
ا ''	Kildul	Part B	Chap-19	C1-0.1.1	Please furnish the power transformer losses (copper, iron and auxiliary) for 220/132kV	offered transformers as per Form FUNC				
					transformer,132/33kV transformer and aux transformer	provided in Section-4, Vol-I of the Bidding				
			Chap-2			document.				
90	Manang &	Vol-II	Annexur		List of drawings / Documents					
	Khudi	Part B	e-B		We understand that these list of drawings & documents need to be submitted at contractual stage.	As per the provision of the Bid document.				
			E-D		Please confirm.					
		•			It is mentioned in the referred clause that, The Contractor shall be responsible to select and verify					
					the route, mode of transportation and make all necessary arrangement with the appropriate					
91	Common	Vol-II	Char ac	CLICI	authorities for the transportation of the equipment. We wish to inform that as a contractor, it would	The mark of the state of the st				
71	Common	Part B	Chap-20	CI-1.2.1	take considerable time to get necessary approvals from concerned governments authorities which	The project will coordinate for the permission				
					indirectly would result in increase the cost due to prolonged completion schedule. Hence request	and approval.				
		. [to consider the same in NEA scope or do necessary arrangement for smooth completion of the					
					project.					





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<u>5.N</u>	Substation	Vol	Chapter	Clause	nstallation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and Ass Bidder's Queries	NEAT D
92	Common	Vol-II Part B	Chap-20		It is mentioned in the referred clause that, The contractor shall carry out the route survey along with the transporter and finalize the detail methodology for transportation of transformer and based on route survey, any modification/extension/improvement to existing road, bridges, culverts etc. if required, shall be in the scope of the bidder. As per our preliminary site visit we understand that, the width of existing road in certain stretches is very narrow(<2.5m), transportation of Transformers(53.33 & 33.33MVA) would not be possible. As it would not be possible to quantify the quantum of work involved, we request to add items in price schedule payable in unit rate for road widening, road & bridge strengthening works.9	Bidders shall assess the requirements of strengthening of existing roads and bridges and quote accordingly. Separate items in BPS shall not be provided for the same.
93	Common	Vol-II Part B	Chap-21	Cl-18.1	As per referred clause, it is mentioned that "Seismic Design Criteria: The copies of type test reports for similar rated equipment, if tested earlier, should be furnished. If the equipment has not been type tested earlier, Test Report/Analysis Report should be furnished." We shall submit the Seismic calculations during detail engineering. Kindly accept.	Bidder may submit required test report during detail engineering.
94	Common	Vol-II Part B	Chap-21		As per referred clause, it is mentioned that "The test reports of the above type tests for GIS (including type test report on Circuit breaker, Disconnectors, Grounding switches, Current and Voltage transformers as per relevant IEC and type tests of SF6/Air & Oil bushing as per IEC 60137 shall be submitted for approval as per Section- GTR, Technical Specification." However we shall submit the same during detail engineering if required. Please confirm.	As per the provision of the Bid document.
95	Common	Vol-II Part B	Chap-21	SN. 4.38 (4)	The minimum outer to outer horizontal clearance between each GIS busduct shall 0.5meter for 220kV & 132kV voltage level. We understand that the minimum outer to outer horizontal clearance between each GIS busduct shall be as per manufacturer standard for 220kV & 132kV GIS. Please confirm.	Bidder is required to comply requirement mentioned in bidding documents.
96	Manang & Khudi	Vol-II Part B	Chap-5A	0. 2	Type Tests on Stranded Conductor/ Stranded wire, The following tests shall be conducted once on sample/samples of conductor from each manufacturing facility: We understand that, HTLS conductor need not to be type tested if bidder submits successful type test reports of offered conductor with in last 5 years from accredited laboratory.	Bidder is to quote as per BPS.
97	Manang & Khudi	Vol-II Part B	Chap-8	C17.03.01/Fir e Protection System	As per the reffered clause, all FPS pipe shall be MS black pipe as per ASTM A53(medium grade) but ASTM A53 standard doesn't specify medum grade but it covers only schedule 40 & 80 pipes. Kindly clarify whether Pipes as per IS 1239 (medium grade) can be used.	Bidder is to comply provisions of bidding documenT
98	Manang & Khudi	Vol-II Part B	Chap-8	Cl-2.03.01	Kindly confirm type of FDA system (whether conventional or Addressable)	As per the provision of the Bid document.
99	Manang & Khudi	Vol-II Part B	Chap-8		kindly shows the list of and a second of the list of an a second of the list of	As per the provision of the Bid document.

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S.N	Substation	Vol	Chapter	Clause	Installation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and As Bidder's Queries	Sociated Substations at Knudl & Manang
100	Khudi	Vol-II Part B	Drawing		The Contractor shall provide AC/DC feeders for complete future bays also as per single line diagram in addition to bays under present scope Number of outgoing feeder for LT Switch gear (MSB, ACDB, DCDB, MLDB and ELDB) shall be considered for complete 220/132/33kV Substation including future bays as mention in SLD.	As per the provision of the Bid document.
101	Common	Vol-II Part B			Besides the dedicated line channel provided by PCM, does it need network equipment to provide network channel (2M, Ethernet)?	Bidder is to quote as per provision of bidding documents.
102	Common	Vol-II Part B			Bidder proposes the bus protection integration for circuit breaker failure protection. Please confirm.	Bidder is to quote as per provision of bidding documents.
103	Common	Vol-II			Bidding Documents have described the function of mimic panel but no involvement in BPS. Please specify whether the mimic panel is under the present scope	Please refer clause number 3.7 of Chapter PSR which states that "Owner has standardized its technical specification for various equipment an works for different voltage levels. Items, which are not applicable for the scope of this package as per schedule of quantities described in BPS, the technical specification for such items should not be referred to."
104	Common	Part B Vol-II			Can switch yard panel room be designed as a flat roof?	As per the provision of the bidding document.
105	Common	Part B			Does the 11kV voltage level related contents belong to the scope of this project?	11 kV Voltage level is not in the scope of this bid.
106	Common	Vol-II Part B			Does the 33kV external power supply line belong to the scope of this project? If yes, what is the length of it?	No, External 33 kV Power supply line is not in the scope of this project.
107	Khudi	Vol-II Part B			For Other lines both end differential relays are under present scope and other differential relays cost is also to be included in these lines protection panels We understand that other remote end substation of Khudi S/S are existing and we have to provide the differential relay for other remote end substation(6 nos) as a loose supply. Hence we need the existing differential relay (type and make)information of other remote end for matching with our end.(Khudi Substaion). Also we understand that Our scope is limited to our Sub-station end only (Khudi and Manang). We have not considered any software & hardware etc. at remote end except differential relay loose supply for other remote end substation connected with khudi. Please confirm	Bidder is required to comply requirement mentioned in bidding documents.
08	Khudi	Vol-II Part B			GIS Building for 220kV, 132 kV & 33kV GIS. The size of GIS Building shall be suitable to accommodate present & future bays and area is to be quoted as per BPS. EOT crane shall be provided in the 220kV, 132 GIS Building as per relevant section of technical specification. The Relay room shall be provided for 220kV, 132 kV GIS Building Please note that 33kV relay room is not mentioned in specification. However size is mentioned in BPS. Please confirm the location of 33kV relay panel room.	33 kV Relay panel shall be accommodated in 33 kV GIS module.

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3.N	Substation		Chapter	Clause	nstallation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and Ass Bidder's Queries	
109	Common	Vol-II Part B			How to transfer the data of energy meter in substation, is there any need to configure electric	NEA's Reponse Bidder is to quote as per provision of bidding documents.
110	Common	Vol-II Part B			Is the remote control center in the automation system located in the main control room of the substation or not?	Bidder is to quote as per provision of bidding documents.
111	Common	Vol-II Part B			Is there any need to configure a Program-controlled dispatching exchange system in the substation?	
112	Common	Vol-II Part B			Is there any need to configure a video surveillance system in the substation?	Bidder is to quote as per provision of bidding documents.
113	Common	Vol-II Part B			In section 3, Clause 2.5, Volume 1, the requirement of transformer test report is mentioned as "Must have successfully carried out the complete type test including Dynamic Short Circuit (DSC) test as per IEC over last 7 years period as on the originally scheduled date of bid opening in Short-Circuit Testing Liaison (STL) - Accredited Laboratory on : - 220 kV voltage class, three phase 160 MVA (or single phase 3 X 53.33 MVA) - 132 kV voltage class, three phase 50 MVA	As per the provision of the Bidding document.
114	Khudi	Vol-II Part B			The scope of work for supply, installation of Optical Line Termination Equipment, Digital Multiplexer, hardware accessories etc. at substations (i.e. Manang substation& Khudi Substation), LDC Kathmandu and its integration work (at LDC Kathmandu) for onward transmission of Data and Voice communication up to LDC Kathmandu is included in the contract. We understand that bidder scope is supply, installation of Optical Line Termination Equipment, Digital Multiplexer, hardware accessories etc. at substations (i.e. Manang substation& Khudi Substation) only. Please confirm our understanding.	Supply of Optical Line Termination Equipment Digital Multiplexer, hardware accessories etc. has not been envisaged in LDC. However, the termination and required integration at adjace substation, (Udipur substation) and required integration work (at LDC Kathmandu) to ensure onward transmission of Data and Voice communication etc. up to LDC Kathmandu via Markichowk substation is under the scope of the Bid. Please also refer Sn. F, Part B, Schedule 4(a), Vol-III of the Bidding document.





5.N	Substation	Vol	Chapter	Clause	nstallation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and Ass Bidder's Queries	Times at Kindi & Manang
1115	Common	Vol-II Part B	Chap-3	item no. 2(v)	Offered technology and size of HTLS conductor including the core should have been fully type tested and the test should have been carried out in a reputed independent Internationally Accredited Laboratory. All the type tests should have been carried out as specified in Vol-II Chapter V Annexure A within the last 5 years. In case the bidder submit the type test of higher size HTLS conductor of offered technology, then the bidder has to submit undertaking letter along with bid to carry out the complete type test of offered technology and size of conductor without additional cost to the Employer. From above we understand following. a. Bidder need not to propose type tested conductor & newly designed conductor can be offered provided bidder carry out successful type test during contract execution stage. b. If bidder proposes successfully type tested conductor, then same need not to be type tested during contract execution stage.	NEA's Reponse As per the provision of the Bidding document.
116	Common	Vol-II Part B			Please confirm if our understanding is correct. All PGCIL drawings Do we have to follow the standard drawings attached with tender document or new design based on BS code is required. (e.g.: Tower, Equipment, cable trench, Drain etc.,)	Drawing provided in the bid is for the reference purpose.
117	Manang & Khudi	Vol-II Part B & Vol- III	Chap-14 & Sch-4(a)	Cl- 25, 12.1.1	As per referred clause no.25, it is states that "chain linked fence as discussed on clause 12 shall be installed on the top of retaining wall." As per referred clause no.12.1.1, it is states that "Fencing shall be provided for complete switchyard, residential area and substation boundary as per drawing." However in price schedule, there is only one line item "chain link fencing as per technical specification and approved drawing excluding concrete" included. Hence kindly furnish break up for fence as (i) fence installed on normal ground as per drawing (C:ENGG/CVL/SYD/FENCE/001) (ii) fence installed on the top of retaining wall. Also furnish drawing for fence installed on the top of retaining wall (if available).	Bidder is to quote as per BPS.
18	Common	Vol-II Part B	Chap-1	Annavura VI	Applicable Standard ITIC COT (1)	Bidder is to quote as per provision of bidding documents.
19	Common	Vol-II Part B	Chap-1	Cl-12.23	In the Sub-station automation system, each gas tight compartments of 220kV & 145kV GIS shall be monitored individually per phase basis. In case it is not possible to monitor the gas tight compartment individually in one BCU, the contractor shall supply additional BCU for the monitoring without any additional cost implication to NEA Please confirm Analog or Digital Input will be provided, please mention monitoring inputs required in BCU	Bidder is required to comply requirement mentioned in bidding documents.
20	Common	Vol-II Part B	Chap-1	Cl-12.5	We understand Communication equipments shall be provided as per BPS only for the link	Bidder is to quote as per provision of bidding documents.





C N	Procurement of Plant, Design, Supply, Installation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and Associated Substations at Khudi & Manang Substation Vol Chapter Clause Bidder's Queries									
5.N	Substation	Vol	Chapter	Clause	Bidder's Queries	NEA's Reponse				
121	Manang & Khudi	Vol-II Part B	Chap-1	Cl-3.1.2 & 3.1.3	220/132/33 kV GIS Manang A.i. 220 kV Line bays: 6 (Six) numbers B.i. 132 kV Line bays: 6 (Six) numbers 220/132/33 kV GIS Khudi A.i. 220 kV line bays: (a) 6(Six) numbers (b) 2 (Two) numbers B.i. 132 kV line bays: 6(Six) numbers. We understand Digital protection Couplers are to be provided for these lines & its connected remote ends. Please provide details of remote end substations.	Bidder is to quote as per BPS. Detail shall be provided during project execution.				
122	Common	Vol-II Part B	Chap-1	Cl-3.2.2.2	Main-II Protection shall be Line current differential protection. For 220 kV Khudi-Manang Double circuit line, line current differential relay matching with both end are to be considered in respective panels at each substation. For 220 kV Khudi-Marsyangdi Double circuit line (at Khudi end), line current differential relay	Bidders understanding is generally in order.Bidder is required to comply requirement mentioned in bidding documents.				
123	Common	Vol-II Part B	Chap-1		We understand Existing RTU facilities(of ABB germany make) augmentation is not envisaged in bidder scope. Please confirm.	Bidder is to quote as per provision of bidding documents.				
124	Common	Vol-II Part B	Chap-4		We understand that 33kV switchgear is Indoor Type & our scope is limited to supply of C264 for 33kV and Integration with the SCADA, Please ensure IED's used in 33kV has IEC61850 Protocol Complaint.	Bidder is required to comply requirement mentioned in bidding documents.				
125	Common	Vol-II Part B			Please confirm whether Busbar protection requirefd will be of Low Impedance or High Impedance. Please confirm whether Centralized Bus Bar Protection Scheme can be provided.	Bidder is required to comply requirement mentioned in bidding documents.				





	Procurem				stallation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and Ass	ociated Substations at Knudi & Manang
S.N	Substation	Vol	Chapter	Clause	Bidder's Queries	NEA's Reponse
126	Common	Vol-II Part B				Bus-bar protection scheme for the complete bus arrangement i.e. for all the bays or breakers including future bays as per the Single line diagram for new substations is under present scope of work. Bidder is required to comply requirement mentioned in bidding documents. However for Khudi substation in SLD of 220kV two bus sections are shown. For future bus section busbar protection is not in present scope.
127	Common	Vol-II Part B (1/3) of III	Chap-3		The voltage level of the CB in the technical specification is 245kV and 132kV, and according to the CB of only 72.5kV in the BPS, please confirm that the CB of that voltage level is required to be in the project. If it is a 72.5kV CB, please provide the technical parameters of this product.	Please refer page 61 of 72 Annexure-IX of Chapter 1, Part B, Volume-II. Rated Current shall be as per BPS.
128	Common	Vol-II Part B (1/3) of III	Chap-9	Cl-1.2.1.4	The technical specification mentions that "In case of single core cables armours shall be of H4 grade Aluminium". It is not indicated whether the multi-core cable is made of aluminum wire or galvanized steel wire. Please confirm whether the multi-core cable is equipped with galvanized steel wire?	Strip wire armouring method shall not be accepted for any of the cables. For control cables only round wire armouring shall be used. For other requirement please refer Technical specification in totality. Bidder is required to comply requirement mentioned in bidding documents.
129	Common	Vol-II Part B (1/3) of III	1	Cl-1.2.2.1	Technical specification requires that "The XLPE insulated cables shall be of FR type, C1 category conforming to IEC: 60502 (Part-I)", and FR is flame retardant (flame retardant), please confirm? If yes, do you require cable grading grade C, please confirm? If it is flame retardant C grade, the corresponding IEC standard should be IEC 60332 instead of IEC 60502, please confirm?	Bidder is required to comply requirement mentioned in bidding documents.
130	Common	Vol-II Part B (1/3) of III	Chap-9	C1-2	For HV POWER CABLES FOR WORKING VOLTAGES FROM 3.3 kV AND INCLUDING 33 kV The technical specification does not specify the cable armor form, is the wire armor or the metal tape armor, please confirm?	Bidder is required to comply requirement mentioned in bidding documents.
131	Common	Vol-II Part B (1/3) of III	1	Cl-4.2.1	Technical specification requires the sheath to be Shrinkage test. Since the sheath is made of PVC material, the standard stipulates that the PVC material does not have the test requirement. It is recommended to cancel the test. Please confirm?	Bidder is required to comply requirement mentioned in bidding documents.
132	2 Common	Vol-II Part B(1/3	Chap-2	Cl-4.6.1	We understand that the creepage distance to consider is 25mm/kV. Please confirm.	As per the provision of the bidding document.



					nstallation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and Ass	
S.N	Substation	Vol	Chapter	Clause	Bidder's Queries	NEA's Reponse
133	Manang	Vol-II Part B(3/3)	Drawing		220kV Bus sectionaliser bays are shown under present scope of work in the SLD, but the same are not covered in "PSR" & "BPS". Please confirm the scope.	Bidder is to quote as per BPS.
134	Manang & Khudi	Vol-II Part B(3/3)	Drawing		Current transformer ratio for Line bay, ICT bay, Bus coupler bay CT ratio details are not provided in the SLD.Hence for Line and Transformer bay we consider as per specification Table-3A as follows: 1. 1600-800/1A ratio for ICT bay and 1600A Line bay. 2. 2400-1600/1A for 2400A Line bay. 3. 4000-2400-1600/1A for BC bay.	Bidder is to quote as per the provision of the bidding document.
135	Manang & Khudi	Vol-II Part B(3/3)	Drawing		General arrangement drawing Dimensions are not mentioned in the GIS layout provided along with the tender. Please provide GIS layout indicating Busing termination points for each bay with dimensions.	The given layout is only for reference. The detail shall be final during detail engineering.
136	Common	Vol-II Part B(3/3)	Drawing		We understand that the dimension of GIS hall shall be as per the GIS requirement according to SLD Dwg. No. C/ENGG-SS/NEA/KHUDI/SLD/01. Please confirm.	The given layout is only for reference. The detail shall be final during detail engineering.
137	Common	Vol-II Part B(3/3)	Drawing		We understand that the dimension of GIS hall shall be as per the GIS requirement according to SLD Dwg. No. C/ENGG-SS/NEA/MANANG GIS/SLD/01. Please confirm.	The given layout is only for reference. The detail shall be final during detail engineering.
138	Khudi	Vol-II Part B(3/3)	Drawing		We understand that un-equipped space to be provided inside GIS hall. 1) for 4 nos. un-equipped future line bay in 220kV GIS Hall; 2) for 4 nos. un-equipped future line bay in 132kV GIS Hall and 3) for 6 nos. un-equipped future line bay in 33kV GIS Hall. Please confirm our understanding.	As per the provision of the bidding document.
139	Manang	Vol-II Part B(3/3)	Drawing		We understand that un-equipped space to be provided inside GIS hall. 1) for 4 nos. un-equipped future line bay in 220kV GIS Hall; 2) for 4 nos. un-equipped future line bay in 132kV GIS Hall and 3) for 6 nos. un-equipped future line bay in 33kV GIS Hall. Please confirm our understanding.	As per the provision of the bidding document.
140	Khudi	Vol-II Part B(3/3)			220kV Bus sectionaliser bays shown as present scope in SLD, but which are not covered in section project & BPS. Please clarify	Bidder is to quote as per BPS.
141	Manang & Khudi	Vol-III		SN. E (V and VI)	EOT crane We understand that EOT crane is Single girder instead of Double girder crane. Please confirm.	Bidder is required to comply requirement mentioned in bidding documents.
142	Common	Vol-III	Sch-1	SN. A2 1	Please confirm the location of 630kVA transformer and its connectivity arrangement with Autotransformer.	Layout shall be finalized during detail engineering.

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	Substation		Chapter	Clause	nstallation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and Ass Bidder's Queries		NEA's Reponse
143	Manang & Khudi	Vol-III	Sch-1	SN. B1 1.08	We understand that the GIB length given in price schedule is the total length including indoor and outdoor GIB. Please confirm.	Bidder's	understanding is generally in order
144	Khudi	Vol-III	Sch-1	SN. B1, 1.07	Khudi SS: 245kV, 1600A,40kA SF6/Air Bushing for Connecting GIS to AIS along with support structure (Single Phase) - 22nos For Khudi SS: As per given Price Schedule,1600A SF6/Air Bushing quantity is mentioned as 22 nos. However as per the scope mentioned in given SLD and BOQ Sr. No. B1 1.03,1.03 we understand that 1600A SF6/Air Bushing quantity should be 25nos. Please confirm the actual requirement & amend the price schedule.	Please re	efer Amendment-I.
145	Manang & Khudi	Vol-III	Sch-1	SN. E	Manang SS & Khudi SS: SF6 Gas filling & evacuating plant for 245kV,145kV & 36kV GIS - 1Set Dew point Meter for 245kV,145kV & 36kV GIS - 1Set SF6 gas leak detector for 245kV,145kV & 36kV GIS - 1Set SF6 Gas Analyser - 1Set We understand that the requirement of testing & maintenance equipments listed below for Manang & Khudi substation is common for all the Voltage levels (i.e 245kV,145kV & 36kV) & seperate tools are not required for each voltage level of 245, 145 & 36kV. SF6 Gas filling & evacuating plant - 1 no. Dew point Meter - 1 no. SF6 gas leak detector - 1 no. SF6 Gas Analyser - 1 no. Please confirm.	maintena class. If s voltage of bidder is	e items Set shall include testing and ance equiement suitable for all voltage single equipment is suitable for all class, same may be accepted. If not, required to supply separate equipment rent voltage class.
146	Common	Vol-III	Sch-1	SN G 10e	We understand busbar protection shall be provided only for the bus section under present scope.	Bidder is	required to comply requirement
147	Common	Vol-III	Sch-1	SN. S	Lattice and Pipe support structure		ed in bidding documents. e provision of the bidding document.
48	Khudi	Vol-III	Sch-4	Part C.SN B1	For disposal lead is not specified. Kindly specify.	4.7, the s work sha	echnical Specification chapter 14 clauserplus earth generated from foundational be disposed away from levelling are at low lying areas within 2Km lead

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J. 1 1	Substation	Vol	Chapter	Clause	nstallation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and As Bidder's Queries	NEA's Reponse
149	Common	Vol-III	Sch-4(a)	BPS SI. No.1	As per our preliminary site visit we understand that, hard rock is envisaged in the proposed substation area. In price schedule, item of excavation given for foundation & other works and it is covers "Excavation in all types of soil and rock including backfilling, disposal etc. for all leads and lifts." We request to give breakup of the above item in price schedule as below:- Excavation including backfilling, disposal etc. for all leads and lifts of: a) Soft Soil b) Soft/Disintegrated Rock c) Hard Rock etc. d) Hard Rock with blasting	Bidder has to quote as per BPS.
50	Common	Vol-III	Sch-4(a)		Drawing for Township Quarters i.e. B Type, C Type, D Type.are not available in the tender drawings. Kindly provide the same.	The same shall be finalized during the detail engineering.
51	Manang	Vol-III	Sch-4(a)	SN. 32	During Site Visit, we came to understand that, required Land for Approach Road for Manang SS has been partially acquired. And same will be acquired after preliminary survey by Substation Bidder. Please confirm.	Land required for the construction of the approach road shall be acquired by the Project during execution.
152	Manang & Khudi	Vol-III	Sch-4(a)	SN.10,11 &29	As per price schedule, the Quarters building (B,C,D type), Transit camp, Recreation hall & Gym hall, car parking shed, control panel room building, security room are in bidders scope. Please provide the following drawings to estimate the finishes quantity of the buildings. 1. Building Plan with room dimension. 2. Elevation of drawing. 3. Section details.	Same shall be provided during detail engineeri
53	Manang	Vol-III		SN. 2.0 J.1(iii)	33kV Bay nos. Please note that 33kV Bay quantity are 10 nos. as per BPS. However as per tender SLD, quantity shall be 9 nos. Please confirm the correct quantity.	As per the provision of the Bid document.
54	Khudi	Vol-III		SN 20	33kV Bay nos. Please note that 33kV Bay quantity are 12 nos. as per BPS. However as per tender SLD, quantity shall be 11 nos. Please confirm the correct quantity.	As per the provision of the Bid document.
55	Manang	Vol-III		SN. G,2.0	132kV CB relay panel without auto reclose In BPS, qty. of circuit breaker relay panel with auto reclose is not mentioned. We are considering auto reclose relay function as an integral part of line distance protection relay for 132kV as per TS. Hence no separate panel is required for CB relay panel with auto reclose. Please confirm our understanding.	Bidder is to quote as per BPS.
56	Khudi	Vol-III	·	(a) i	132kV CB relay panel without auto reclose In BPS, qty of circuit breaker relay panel with auto reclose is not mentioned. We are considering auto reclose relay function as as an integral part of line distance protection relay for 132kV as per TS.Hence no separate panel is required for CB relay panel with auto reclose. Please confirm our understanding.	Bidder is to quote as per BPS.
57	Manang & Khudi	Vol-III		SN. K(ii)	Digital protection coupler (for other end) Please clarify for other end Digital protection coupler.	Bidder is to quote as per provision of bidding documents.



	Procurem	ent of P	lant, Desi	gn, Supply, In	stallation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and Ass	ociated Substations at Khudi & Manang
S.N	Substation	Vol	Chapter	Clause	Bidder's Queries	NEA's Reponse
158	Common	Vol-III			The requirement of various items / equipment and civil works are indicated in the bid price schedules (BPS). We understand that, quantities mentioned against the items in the Billing Price schedule are indicative. Payment will be made based on actual work executed and approved drawings as per the unit rates mentioned in the price schedule.	As per the provision of the Bidding document.
159	Khudi	Vol-III	Sch-1	SN. G. 1.0 e	We understand busbar protection shall be provided only for the bus section under present scope. Bus bar protection for future bus section is not in present scope. Please confirm.	For 220 kV of Khudi bus bar have two section. Future section busbar protection is not under present scope.
160	Common	Vol-III	Sch-1		As per section project, 10 nos of 33kV bays to be automated. But only 9 bays are under present scope. Please confirm 33kV bus sectionaliser bay module towards future bus section & its automation is not in present bidder scope.	In 33 kV total 9 bays are under present scope. However SAS is considered as 10 bays in BPS. Bidder is to quote as per BPS.
161	Khudi	Vol-III	Sch-1	SN. J1. a (iii)	As per section project 12 nos of 33kV bays to be automated. But only 11 bays are under present scope. Please confirm 33kV bus sectionaliser bay module towards future bus section & its automation is not in present bidder scope.	In 33 kV total11bays are under present scope. However SAS is considered as 12 bays in BPS. Bidder is to quote as per BPS.
162	Manang & Khudi	Vol-III		SN. K.iii, a, b, c & d and Khudi SN. T.3.0 a & b	There is no quantity mentioned for PBAX, 4Wire E&M interface card, E1 interface, 2 Wire interface with one trunk in the bid price schedule. Kindly confirm the requirement.	The items mentioned in the sub categories of k, i.e. a,b,c &d are the items to be included in one set of PBAX.
163	Manang & Khudi	Vol-III		SN. 1.4, 1.5 & 1.6	As per referred line item, 132kV terminations are indicated only for one end of Line bays, 220/132kV Transformer bay (LV side) & 132/33kV Transformer bay in Bid price schedule. Kindly include & revise the schedule.	Bidder is to quote as per provision of bidding documents.
164	Manang	Vol-III Part A	Sch-2	SN. R	as per the referred clause, Split AC has been asked for Township quarters. Kindly clarify the rooms / areas of Town ship quarters which need to be air conditioned & also confirm the details of standby requirements (if any)	Same shall be provided during detail engineering
165	Khudi	Vol-III Part A	Sch-2	SN. R	as per the referred clause, Split AC has been asked for Township quarters. Kindly clarify the rooms / areas of Town ship quarters which need to be air conditioned & also confirm the details of standby requirements (if any)	Both mode of operation shall be provided
166	Manang	Vol-III Part A	Sch-2	SN. R	Kindly clarify, whether split AC should have hot & cool mode facility or only cooling mode.	Both mode of operation shall be provided
167	Khudi	Vol-III Part A	Sch-2	SN. R	Kindly clarify, whether split AC should have hot & cool mode facility or only cooling mode.	Both mode of operation shall be provided
168	Manang & Khudi	Vol-III Part B	Sch-1	SN. T.A.i	As per BPS New FOTE equipment is to be provided only at Manang & Khudi SS & we understand SDH Equipment is already available at Udipur SS. Please provide make & model of existing SDH Equipment along with required optical /electrical slots/ports availability for integration. Also optical interfaces for Udipur SDH Equipment connectivity with new proposed SDH equipment at Khudi SS. Please confirm same will be provided by NEA.	The same shall be provided during detail engineering.



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	Procurement of Plant, Design, Supply, Installation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and Associated Substations at Khudi									
S.N	Substation	Vol	Chapter	Clause	Bidder's Queries	NEA's Reponse				
169	Manang	Vol-III Part B	Sch-1 Part A	SN. R	We are not considering AC system for Township quarters as the same is not mentioned in project scope. Please confirm.	Bidder is to quote as per BPS.				
170	Manang	Vol-III Part B	Sch-1 Part B	SN. B.c	We have considered conventional type fire alarm system for GIS Hall & Control Room. Please confirm.	As per the provision of the Bidding document.				
171	Khudi	Vol-III Part B	Sch-1 Part B	SN. B.c	We have considered conventional type fire alarm system for GIS Hall & Control Room. Please confirm.	As per the provision of the Bidding document.				
172	Manang & Khudi	Vol-III Part B	Sch-1		Manang SS Digital Protection Coupler (220 kV & 132 kV)-12 Nos. Digital Protection Coupler(for other end)- 10 Nos. Khudi SS Digital Protection Coupler 220 kV & 132 kV)- 14 Set Digital Protection Coupler (for other end)-26 Nos. Refer Digital protection Coupler quantities for Manang & Khudi SS & its associated remote ends. For Manang SS 220 kV Line bays are 6 Nos. & 132 kV line bays are 6 Nos. However remote end Digital protection coupler quantities required as per BPS is 10 Nos. instead of 12 Nos. Similarly for Khudi SS 220 kV Line bays are 8 Nos. & 132 kV line bays are 6 Nos. However remote end Digital protection coupler quantities required as per BPS is 26 Nos. Please provide details of usage of DPC's for Khudi & associate connected links/substations.	Bidder is to quote as per BPS.				
173	Common	Vol-III Part C	Sch-1	SN. C, e	Open / Close contactor assembly, timers, key interlock for one complete (3 phase) dis-connector and (3 phase) earthing switch (1 No. of each type and rating) - 1Set Please note that Key interlock is not applicable. All proposed interlocks are electrical with pad locking arrangement.	Based on provision of bidding documents, safety and operational requirement same will be reviewed during detailled engineering.				
174	Common	Vol-III Part C	Sch-1		245kV Current Transformer: Secondary bushing of each type Please note that Secondary bushing is not applicable for GIS CT, therefore please remove this item.	If the secondary bushing is not applicable in the proposed GIS design, the same shall be finalized during the detail engineering.				
175	Khudi	Vol-III Part C	Sch-1	SN. II,n	Khudi SS: n) SF6 to airbushing of each type & rating complete in all respect - 2Set SF6 to airbushing of each type & rating complete in all respect - 2nos (single phase)	Bidder is quote as per provision of bidding documents.				
176	Manang	Vol-III Part C	Sch-1	SN. II,n	Manang SS: n) SF6 to air bushing of each type & rating complete in all respect - 2Set As per price schedule only 1600A rating of air bushing is required, therefore the air bushing of only that rating is applicable for Manang s/s.	Bidder's understanding is generally in order.				
177	Common		·		"The combination of the metallic sheath (lead sheath) in combination with wire screen shall be designed to meet the requirement of the system short circuit rating as specified in the bidding documents." However the value of fault current is not specified, kindly confirm the value of fault current to be carried by lead sheath in combination with copper wire screen.	Please refer clause number 5.3 of PSR,according to which 132 kV short circuit level is 31.5kA for 1 Sec.				

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					Installation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and Ass	
).IN	Substation	Vol	Chapter	Clause	Bidder's Queries 2 River crossing on which bridges are under construction.	NEA's Reponse
70						Bidder is quote as per provision of bidding
78	Common				Kindly confirm the Completion plan of bridge construction for vehicle movements across these	documents.
			1		two rivers.	
79	Common				33kV NCT & 72.5 Current Transformer & Potential Transformer	Please refer Annexure-IX of Chapter 1, Part B
.,,	Common				Kindly Provide technical specification.	Volume-II. Bidder is to quote as per BPS.
					d) Must have successfully carried out the complete type test including Dynamic Short Circuit	
					(DSC) test as per IEC over last 7 years period as on the originally scheduled date of bid opening in	
80	Common				Short-Circuit Testing Liaison (STL) - Accredited Laboratory on :	As months analysis an aftha Didding do aymand
. 80	Common				- 220 kV voltage class, three phase 160 MVA (or single phase 3 X 53.33 MVA)	As per the provision of the Bidding document
					- 132 kV voltage class, three phase 50 MVA	
					Please confirm if this is acceptable.	
					However, IF the Bidder/Manufacturer has not conducted the complete type tests including DSC in	·
					Short-Circuit Testing Liaison (STL) - Accredited Laboratory Then the bidder has to submit	
	-				undertaking letter along with bid to carry out the complete type test on the above mentioned	
					ratings of transformers including DSC in Short-Circuit Testing Liaison (STL)-Accredited	
81	Common				Laboratory without any extra cost to the employer.	As per the provision of the Bidding documen
					If NEA do not accept test reports of higher rating transformer, than we can proposed for short	
					circuit testing at STL laboratory, please confirm if this is acceptable.	
					Please confirm if this is acceptable.	
					If the Bidder/Manufacturer has conducted the type test including DSC in STL but it is beyond the	
					7 years as on the date of bid opening and or of the higher rating of Transformer THEN the bidder	
				•	has to submit undertaking letter along with bid to carry out the complete type test on the above	
					mentioned ratings of transformers including DSC in Short-Circuit Testing Liaison (STL)-	
182	Common				Accredited Laboratory or in NABL witnessed by - authorized STL and NEA authorized	As per the provision of the Bidding documen
102	Common				representatives without any extra cost to the Employer.	As per the provision of the Bidding documen
					Type tests on above mentioned ratings for transformer can be performed at our test laboratory	·
					which is NABL accredited in presence of NEA officials. DSC can be done in Short-Circuit	
					Testing Liaison (STL)-Accredited Laboratory.	·
					Please confirm if this is acceptable.	·
					**************************************	Acquiring the water facility, utility connection
						distribution and usages are in the scope of
					Spaces for Office, Store & Colonies, Availability of Electricity/Power and Water facility for	contractor and contractor shall pay according
183	Common				construction purpose at SS plot. Kindly confirm.	However, NEA shall do the required
					construction purpose at 55 piot. Kindry commin.	coordination's with local utility offices if
						necessary.
					Substantial no of trees are available at Manang SS Plot which need to be removed from the site	noossa j.
					area. We trust that, necessary permissions/ approval from forest/any other department will be	
184	Manang				arranged by NEA. Please confirm. Also there is no item for tree cutting price schedule, Please	Tree cutting is in the Employer's scope
					include the item for the same.	
		<u> </u>		<u> </u>	include the item for the same.	

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	Procurement of Plant, Design, Supply, Installation and Commissioning of Manang - Khudi - Udipur 220kV Transmission Line and Associated Substations at Khudi & Manang									
S.N	Substation	Vol	Chapter	Clause	Bidder's Queries	NEA's Reponse				
185	Common				We request plot size of Manang & Khudi GIS SS. Kindly provide the details.	Same shall be provided during detail engineering.				
186	Manang & Khudi	Vol-III	Sch-4(a)		As per BPS, construction of buried cable trench for laying 132kV & 33kV cable is in bidder's scope and the same is paid in RM Basis. Trench cross section drawing for 132kV is enclosed with tender document for two types (i.e. sand filled and PCC Trench). However Trench cross section drawing for 33kV is not enclosed with tender document. Please furnish the same, in order to estimate the quantity.					

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