### Electricity Grid Modernization Project OCB Name: Design, Supply, Installation, Testing and Commissioning of 132 kV Borang - Lapang and 220 kV Lapang - Naubise (Ratmate) 220kV Transmission Line and Associated Substations OCB No: PMD/EGMP/BNRTLSS-077/78-01 Clarification-2

SI. No.	Sub-Section/ Clause in TS	Reference Statement in the TS		NEA Reply/Clarification
1	CHAPTER-15: CONTROL AND RELAY PANELS, 33	CONTROL PANEL	For Substations with Automation System, control and monitoring at bay level will be part of Local HMI of respective Bay Control Unit. Hence, conventional type control panels are not applicable. Please confirm.	As per specification
2	CHAPTER-15: CONTROL AND RELAY PANELS, 33	LINE PROTECTION PANEL (220kV and 132kV)  9. Cut-out and wiring with TTB for POWERGRID supplied energy meter	We understand that supply of Energy Meters are in the present scope. Please confirm.	Confirm
3	CHAPTER-15: CONTROL AND RELAY PANELS, 33	LINE PROTECTION PANEL (132kV) 10. Directional Back up Over current and E/F protection scheme: 1 Set	We understand that Numerical over current and earth fault protection as in-built function of Bay control unit will also be acceptable. Please confirm.	Confirm.
4	CHAPTER-15: CONTROL AND RELAY PANELS, 33	BUSCOUPLER PANEL     Numerical Non Directional Over Current and Earth Fault Relay 1No.with High Set Feature and in built LBB protection ( LBB function as part of BCU is acceptable): 1 No.	We understand that Numerical over current and earth fault protection as in-built function of Bay control unit will also be acceptable. Please confirm.	Confirm
5	CHAPTER-15: CONTROL AND RELAY PANELS, 33	TRANSFORMER PROTECTION PANEL (220/132kV)  8. Cut-out and wiring with TTB for energy meter	We understand that supply of Energy Meters are in the present scope. Please confirm.	Confirm
6 .	CHAPTER-15: CONTROL AND RELAY PANELS, 33	33kV Line Protection Panel	We understand that over current and earth fault protection as in-built of Bay Control Unit will also be acceptable. Please confirm.	Confirm
7	CHAPTER 17: SUBSTATION AUTOMATION SYSTEM, 3.3.4,	Communication Protocol The communication protocol for gateway to control centre must be open protocol and shall support IEC 60870-5-101 and IEC 61850 for all levels of communication for sub-station automation such as Bay to station HMI, gateway to remote station etc.	图 1981 日本版 - 新生活品 1971 1971 1971 1	Confirm
8	CHAPTER 17: SUBSTATION AUTOMATION SYSTEM, 4.1.5,	Switched Ethernet Communication Infrastructure: The bidder shall provide the redundant switched optical Ethernet communication infrastructure for SAS. One switch shall be provided to connect all IEDs for two bays of 220kV yard to communication infrastructure. Each switch shall have at least two spare ports for connecting bay level IEDs and one spare port for connecting station bus.	We propose below guideline for estimation of Bay level Ethernet Switches for 132kV and 33kV system. Please confirm.  One switch shall be provided to connect all IEDs for every two bays of 220kV, every three bays of 132kV and one switch for all the bays of 33kV to communication infrastructure.	As per specification
9	CHAPTER 17: SUBSTATION AUTOMATION SYSTEM	TYPICAL ARCHITECTURAL DRAWING OF SUBSTATION AUTOMATION SYSTEM Note: 3. For gateway, it shall communicate with Remote Supervisory Control Centre (RSCC) on IEC 60870-5-101 protocol.	We understand that Gateway 1 and Gateway 2 as in-built function of Server 1 (Hot) and Server 2 (Standby) will aslo be acceptable. Please confirm.	As per bid documents
10	CHAPTER 1-Project Specification Requirement, 4.1.X)	Complete relay and protection system as per section –Control and Relay panels including Bus Bar Protection for 220 kV and 132 kV Double Bus Bar Switching Scheme. Low Impedance numerical impedance relay with centralized type scheme is acceptable for 220 kV system.	We understand that Numerical Centralized Low Impedance Busbar Protection is acceptable for both 220kV and 132kV system. Please confirm.	Confirm
11	CHAPTER 1-Project Specification Requirement, 13.0.k)	One number each Energy meter for the record and revenue purpose is to be provided for each 220/13/23/1/1 Vays (Bus coupler bays to be excluded) at Borang and Lapang, Biharthok substations under present scope of contract, meeting the requirement as specified at Annexure -V.	Please share the Annexure-V, which is missing in the RFQ documents.	Please refer Page IIB-92
12	BOQ Price Schedule - Spares	Indicating Lamps(50% of used) and Color Caps of each color for indicating lamps (30% of used) for 132/33kV CRP at Borang AIS Substation	and the control and the control and the present some Please confirm	Please quote as per BPS. If not required shall be deleted during DDE
13	BOQ Price Schedule	Part I-B: BORANG 132/33/11 kV AIS Substation 1.6.5: 33 kV Protection Control and Relay Panel complete with all accessories as per specification for Line Bays - 4 Set	Convenional type country paries in the present scope, riesase commit.  As per the Single Line Diagrams, Number of 33kV Feeders is 3 Nos. only. Kindly check the Qty of 33kV Line Feeder CRP Qty in Price Schedule.	Please quote as per BPS. If not required shall be deleted during DDE
14	BOQ Price Schedule	PART I-C LAPANG 220/132/33/11 kV GIS Substation 2.2: 145kV Transformer Control and Protection Panel (For both HV & MV side) - 3 Nos.	As per the Single Line Diagrams, Number of 132/33kV kV Transformer is 1 No. only. Kindly check the Qty of 132/33kV kV Transformer CRP (HV & MV) Qty in Price Schedule.	Please quote as per BPS. If not required shall be deleted during DDE
15	BOQ Price Schedule	PART I-C LAPANG 220/132/33/11 kV GIS Substation 2.2: 145kV Transformer Control and Protection Panel (For both HV & MV side) - 3 Nos.	We assume that control and protection of MV side of 132/33kV Transformer will be part of 33kV Indoor Switchgear. Please confirm.	Please quote as per BPS. If not required shall be deleted during DDE
16	BOQ Price Schedule	PART I-C LAPANG 220/132/33/11 kV GIS Substation COMMON SPARES: Bay unit module - 1 Set	We understand that Bay Unit module is not applicable, incase of Centralized type Busbar Protection. Please confirm.	Please quote as per BPS. If not required shall be deleted during DDE
17	BOQ Price Schedule	PART I-C LAPANG 220/132/33/11 kV GIS Substation Breaker protection Relay Spares: Breaker failure relay - 1 No.	We understand that Breaker failure relay is not applicable, if offered as in-built function of busbar protection relay as per specification clause 26.3. Please confirm.	Please quote as per BPS. If not required shall be deleted during DDE
18	1-phase CT/PT/isolator switches/groundin switches/bushings and 3-phase circu breaker are required for 145kV GIS	g Design, Supply, Installation, Testing and Commissioning of 132 kV Borang - Lapang it and 220 kV Lapang - Naubise (Ratmate) 220 kV -Transmission Line and Associated Substations-VOLUME II(B) OF III-March 2021-Pg.13-15, 4.1-220/132/33/11kV Lapang, Biharthok (New) GIS Substation	As per the received Clarification 1-compressed, no response has been made to this clarification. Pls confirm is that the CT of all bay and DS/ES of ICT(single TR) bay shall be 1-phase or not? We prefer 3-phase because it would be more easily to connct the 3-phase circuit breaker which is required in the scope.	Both 1-phase or 3-phase shall be accepted
19	Single phase auto reclosing is required for circuit breaker in chapter 19 -ANNEXURE-while three phaes relclosing is required in TECHNICAL DATA SHEET-19.3	11. Section 6: Employer's Requirements/Gas insulated Switchgear-chapter 19-GAS insulated	As per the received Clarification 1- No. 6, the response is decide it during DDE. The response	Both 1-phase or 3-phase shall be accepted
20	Scope description of TESTING MAINTENACE EQUIPMENT of this tw documents is different .	8. 1. Section 6: Employer's Requirements/Gas Insulated Switchgear-chapter 19-GAS INSULATED SWITCHGEAR-Clause 26; 2. BOQ-Schedule No. 1: Plant and Equipment including Mandatory Spares to be supplied from abroad;	按boq报价,技术规范要求的作为额外可选报价	

Electricity Grid Modernization Project

OCB Name: Design, Supply, Installation, Testing and Commissioning of 132 kV Borang - Lapang and 220 kV Lapang - Naubise (Ratmate) 220kV Transmission Line and Associated Substations

OCB No: PMD/EGMP/BNRTLSS-0777/8-01

Clarification-2

l. No.	Sub-Section/ Clause in TS	Reference Statement in the TS	Query	NEA Reply/Clarification
	As per the scope description of 4.1 and	<ol> <li>Design, Supply, Installation, Testing and Commissioning of 132 kV Borang - Lapang and 220 kV Lapang - Naubise (Ratmate) 220 kV -Transmission Line and Associated Substations-VOLUME: I(B) OF III-March 2021-Pg. 13-15, 4.1, Pg. 55 general layout, Pg. 59 single line;</li> <li>BOQ-Schedule No. 1: Plant and Equipment including Mandatory Spares to be supplied from abroad;</li> </ol>	接特变设计先做方案	
22	As per the scope description of 4.1, 132 kV Auxiliary Bus to connect spare unit of Transformer is required for ICT bay for single phase transformer.	<ol> <li>Design, Supply, Installation, Testing and Commissioning of 132 kV Borang - Lapang and 220 kV Lapang - Naubise (Ratmate) 220 kV -Transmission Line and Associated Substations-VOLUME: II(B) OF III-March 2021-Pg.13-15, 4.1, Pg.58 general layout, Pg.59 sinlge line;</li> </ol>		
23		<ol> <li>Section 3: Evaluationand Qualification Criteria :</li> <li>Design, Supply, Installation, Testing and Commissioning of 132 kV Borang - Lapang and 220 kV Lapang - Naubis (Ratmate) 220 kV -Transmission Line and Associated Substations-VOLUME: II(B) OF III-March 2021-Pg.131 clasue 9.2</li> </ol>	As per the received Clarification 1 No.17, the response is decide it as per ECQ. STL labs have no ability to do full type test as per IEC requirement, so we recommend the end user to take the type test with witness of STL supervisor.	As per EQC
		TRANSMISSION LINE	OUFRIES	
24	Vol - 2A, Section-1		As per the Details of Line Materials in the table provided. We understand that the properties of the conductor provided for 132KV Line are to be revised. Min UTS(kN) for both ACSR BEAR Conductor and ACSR MOOSE conductor are same as per the table. Request for revision in the ACSR Bear Conductor properties.	Please proceed as per standard practices
25	Vol - 2A, Section-1	Cl: no:2.3.3, 2.3.4,2.3.5,2.3.8	Understand that the design parameters mentioned in the clauses are pertaining to 220kV tower designs only and there is no 132kV tower design envisaged in the tender. If any design requirement arises during the execution, the design parameters for 132kV TL shall be as per relevent IS standards/manuals. Please confirm	As per BS or equivalent to BS standard
26	Vol - 2A, Section-4	Cl: no:1.2.1	Please confirm wether the TL envisaged in the tender are passing through Snow Zone	Please refer clarification1
	The second secon	Cl: no:2.4.1	Please confirm whether foundations of 220kV DA type tower also will be given by the employer	Please refer clarification1
28	Vol - 2A, Section-4 Vol - 2A, Section-4	Cl: no:6.1.1	Please confirm if , loading details of of DDS and MD type tower shall be given during tender stage or shall be shared with the successful bidder. Also, please confirm whether design and drawings of MD type tower hs to be submitted along with the bid as there is no requirement of MD type tower as per the price schedule.	shall be decided during DDE
			Please provide the reliability level for DDS tower.	shall be decided during DDE
30	Vol - 2A, Section-4	Cl: no:6.1.2 Cl: no:6.1.3.2		As per BS or equivalent to BS standard
31	Section 6: Employer's Requirements/General Information and Scope	Cl no: 3,3	Nominal Length of 220kV 160kN & 210kN Insulators are mentioned as 2890mm & 4610mm respectively.  The length of 220kV 210kN insulator (4610mm) seems abnormal & very high than the requirement.  Please confirm to offer the 210kN insulator length to be 2.9 - 3m approx. (similar to the 160kN insulator) by meeting all other technical requirements.	As per BS or equivalent to BS standard
		COMMERCIAL Q	VERIES  Very min.(one supplier) is meeting the validty of 7 years as on date of bid submission from the	I
32	Volume-I, Section-3 Evaluation and qualification criteria	Clause 2.5., Item no:2.(iii). 220kV GIS Switchgear As per referred clause, it is mentioned that "subcontractors Must have successfully carried out the complete type test as per IEC in Short-Circuit Testing Liaison (STL) - Accredited Laboratory on 220 kV voltage class GIS Switchgears (Circuit Breaker, Disconnectors, Grounding Switches, Instrument Transformers, SF6/Air & Oil Bushing etc.). However if the manufacturer has not conducted complete type test in Short-Circuit Testing Liaison (STL) - Accredited Laboratory over last seven (7) years as on the date of bid submission, bidder has to submit undertaking letter along with bid to carry out the complete type test in Short-Circuit Testing Liaison (STL) - Accredited Laboratory from offered Manufacturer without any extra cost to Employer."	Very min, one supplier's in leveling the valuary or 'years as on tack or his decreased in STL Accredited laboratory. Most of the suppliers are having the validity of 10 years from the STL accredited laboratory and also the same is in line with the requirement asked in earlier' Lapsiphed changunarayan project' (PMP/PTDEEP/LCSCP073074). Further, as per Chapter 2- General Technical Requirement, Cl.no.9.2, it is mentioned as "The test reports submitted shall be of the tests conducted within last 10 (ten) years prior to the originally Scheduled date of bid opening, in case the test reports are of the test conducted earlier than 10 (ten) years prior to the originally Scheduled date of bid opening, the contractor shall repeat these test(s) at no extra cost to the purchaser."  As above clauses (GTR & sec-3 EQC), are contradicting with each other, we request NEA to accept reports of type tests having the validity of 10 years conducted in NABL accredited labs or in Manufacturer's own testing laboratories which are accredited by NABL and request to modify the referred clause as below  "subcontractors Must have successfully carried out the complete type test as per IEC in Short-Circuit Testing Liaison (STL) - Accredited Laboratory on 220 kV voltage class GIS Switchgears (Circuit Breaker, Disconnectors, Grounding Switches, Instrument	As per EQC

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il. No.	Sub-Section/ Clause in TS	Reference Statement in the TS	Query	NEA Reply/Clarification
33	Volume-I, Section-3 Evaluation and qualification criteria	Clause 2.5., Item no:3.(iii) 132kV Gas Insulated Switchgear As per referred clause, it is mentioned that "subcontractors Must have successfully carried out the complete type test as per IEC in Short-Circuit English Liaison (STL) - Accredited Laboratory on 132 kV voltage class GIS Switchgears (Circuit Breaker, Disconnectors, Grounding Switches, Instrument Transformers, SF6/Air & Oil Bushing etc.); However if the manufacturer has not conducted complete type tests in Short-Circuit Testing Liaison (STL) - Accredited Laboratory over last seven (7) years as on the date of bid submission, bidder has to submit undertaking letter along with bid to carry out the complete type test in Short-Circuit Testing Liaison (STL) - Accredited Laboratory from offered Manufacturer without any extra cost to Employer."	Very min.(one supplier) is meeting the validity of 7 years as on date of bid submission from the STL Accredited laboratory. Most of the suppliers are having the validity of 10 years from the STL accredited laboratory and also the same is in line with the requirement asked in earlier" Lapsiphedi changunarayan project" (PMP/PTDEEP/LCSCP/073/074) Further, as per Chapter 2. General Technical Requirement, Cln.o. 9.2, it is mentioned as "The test reports submitted shall be of the tests conducted within last 10 (ten) years prior to the originally Scheduled date of bid opening, in case the test reports are of the test conducted earlier than 10 (ten) years prior to the originally Scheduled date of bid opening, the contractor shall repeat these test(s) at no extra cost to the purchaser."  As above clauses (GTR & sec-3 EQC), are contradicting with each other, we request NEA to accept reports of type tests having the validity of 10 years conducted in NABL accredited labs or in Manufacturer's own testing laboratories which are accredited by NABL and request to modify the referred clause as below  "subcontractors Must have successfully carried out the complete type test as per IEC in Short-Circuit Testing Liaison (STL) - Accredited Laboratory on 132 kV voltage class	As per EQC
34	Volume -1 Section-3 - Evaluation and Qualification Criteria	Clause 2.5., Item no:2.(ii). 220kV GIS Switchgear, As per referred clause, It is stated as , "Must have designed, manufactured and supplied GIS Switchgears 220 kV (Circuit Breaker, Disconnections, Grounding Switches, Instrument transformers, SF6/ki4 & Oil Bushing, etc.) at least twice the bid quantity as a main supplier over last five (5) years period ending on the date of bid submission. Out of supplied quantity, a minimum of half the bid quantity shall have been in operation satisfactorily to the end users for at least two (2) year	As per the previous NEA ADR Tenders we request you to accept the qualification criteria for	As per EQC
35	Volume -1 Section-3 - Evaluation and Qualification Criteria	Clause 2.5., Item no:3.(ii). 132kV GIS Switchgear, As per referred clause It is stated as ," Must have designed, manufactured and supplied GIS Switchgears 132 kV (Circuit Breaker, Disconnections, Grounding Switches, Instrument transformers, SF6/kir & Oil Bushing, etc.) at least twice the bid quantity as a main supplier over last five (5) years period ending on the date of bid submission. Out of supplied quantity, a minimum of half the bid quantity shall have been in operation satisfactorily to the end users for at least two (2) year	As per the previous NEA ADB Tenders we request you to accept the qualification criteria for same or higher voltage level.  This is in line with the previous NEA Tenders 1. Lapsiphedi changunarayan project" (PMP/PTDEEP/LCSCP/073/074) 2. DADAKHET - RAHUGHAT 132 KV TRANSMISSION LINE PROJECT, (PMD/EGMP/DRTLS-077/78-01). Accordingly request to modify as below "Must have designed, manufactured and supplied GIS Switchgears 132 kV or higher voltage class (Circuit Breaker, Disconnections, Grounding Switches, Instrument transformers, SFE/Air & Oil Bushing, etc.) at least twice the bid quantity as a main supplier over last five (5) years period ending on the date of bid submission. Out of supplied quantity, a minimum of half the bid quantity shall have been in operation satisfactorily to the end users for at least two (2) year	As per EQC
	Volume -1 Section-3 - Evaluation and Qualification Criteria	Clause 2.5., Item no:1.(ii). Power Transformer (220kv and 132kv and 33kv voltage class). As per referred clause, Must have designed, manufactured and supplied power transformer of capacity 200 MVA or above, 220 kV or higher Voltage class, at least twice the bid quantity as a main supplier over last five (5) years period ending on the date of bid submission. Out of supplied quantity, a minimum of half the bid quantity shall have been in operation satisfactorily to the end users for at least Two (2) Years as on the date of bid opening.	Must have designed, manufactured and supplied power transformer of capacity 160 MVA or	As per EQC
	Volume -1 Section-3 - Evaluation and Qualification Criteria		As per Chapter 2- General Technical Requirement, Cl.no.9.2, it is mentioned as "The type tests conducted earlier should have either been conducted in accredited laboratory (accredited based on IEC Guide 25 / 17025 or EN 45001 by the national accreditation body of the country where laboratory is located) or witnessed by Utility or representative of accredited test lab or reputed consultant."	

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SI. No.	Sub-Section/ Clause in TS	Reference Statement in the TS	Query	NEA Reply/Clarification
37			Hence, we request NEA to accept reports of type tests conducted in NABL accredited labs or in Manufacturer's own testing laboratories which are accredited by NABL.  Regarding DSC, We request NEA to accept reports of Dynamic short circuit test conducted in NABL Accredited Laboratory/international accredited laboratory witnessed by — authorized STL representative on 220 kV or higher voltage class transformers provided it shall meet the similarity criteria as mentioned in IEC 600076-5. The same will be proved through Dynamic short circuit calculations for the offered transformers. Accordingly, we request to modify the referred clause as below:  "Must have successfully carried out the complete type test including Dynamic Short Circuit (DSC) test as per IEC over last 10 (ten) years period as on the originally scheduled date of 61d opening in Short-Circuit Testing Liaison (STL) - Accredited Laboratory OR must have successfully completed type test including DSC test conducted as per IEC over last 10 (ten) years period as on the originally scheduled date of 61d opening in any internationally accredited Laboratory/NABL Accredited Laboratory in the presence of STL representative and certified the same by STL representative as indicated below:  - Type Test on 220 kV voltage class, three phase 200 MVA (or single phase 6 X 33.33 MVA) and DSC test on similar type of 220 kV Voltage level Transformer.  - Type test on 132 kV voltage class, three phase 8 MVAand DSC Test on similar type of 132 kV Voltage level Transformer.	As per EQC
38	Volume -1 Section-3 - Evaluation and Qualification Criteria	Clause 2.5., Item no:2.(iii). 220kV GIS Switchgear & 2 (iii) 132kV GIS Switchgear	It is stated as ," However if the manufacturer has not conducted complete type tests in Short-Circuit Testing Liaison (STL) - Accredited Laboratory over last seven (7) years as on the originally scheduled date of bid opening, bidder has to submit undertaking letter along with bid to carry out the complete type test in Short-Circuit Testing Liaison (STL) - Accredited Laboratory from offered Manufacturer without any extra cost to Employer.  As accepted by NEA for Power Transformers, We request you to accept the withness of Authorised STL and NEA for GIS and amend the Clause as follows:  However if the manufacturer has not conducted complete type tests in Short-Circuit Testing Liaison (STL) - Accredited Laboratory over last Ten(10) years as on the originally scheduled date of bid opening, bidder has to submit undertaking letter along with bid to carry out the complete type test at NABL Accredited Laboratory or any independent laboratory witnessed by - Authorized STL and NEA without any extra cost to the employer.	As per EQC
39	Volume -1 Section-3 - Evaluation and Qualification Criteria	Clause 2.5., Item no:2.(iii). 220kV GIS Switchgear & 3. (iii) 132kV GIS Switchgear	As per the referred clause it is mentiond as subcontractor or manufacturer," Must have successfully carried out the complete type test as per IEC in Short-Circuit Testing Liaison (STL) - Accredited Laboratory on 220 kV voltage class GIS Switchgears (Circuit Breaker, Disconnector, Grounding Switches, Instrument Transformers, SF6/Ar & Oil Bushing etc.;)."  "In case of an Indian GIS manufacturer who have not conducted the type testing of 220kV, 132kV & 33kV GIS manufactured in India but the parent company or subsidiary company have conducted the type testing of 220kV, 132kV & 33kV or higher voltage class. The type test reports of the parent company or subsidiary company shall be acceptable provided that the design of the 220kV, 132kV, 33kV GIS being offered from Indian works is same as that of GIS manufactured and successfully type tested from the parent company or subsidiary company/parent company".  Hence, we request NEA to accept the type test of parent company, if the GIS manfaucturers having stipulted performance and meeting criteria (i) and (ii) of above referred clause. Kindly confirm	Please refer clarification 1
		ELECTRICAL		
40	1618465838_Clarification 1	Sr.No. 105	As per BPS line items of Borang Substation, Sl.no. 2.2-I, ii, iii & iv, only Digital Protection coupler, IP-PBAX, Optical Distribution frame & Approach cable are listed and there is no SDH Equipment listed.  Whereas, as per specification, Vol-II-B, (pg-IIB-668)-Appendix-A, SDH Equipment are listed out.  Based on clarification response, we understand that, Bidder has to supply the items as per BPS and any other items are required during detailed Engineering, the same shall be paid additionally by NEA.	Price of other items shall be included with the respective BPS items. No extra payment will be made for such items.

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SI. No.	Sub-Section/ Clause in TS	Reference Statement in the TS	Query	NEA Reply/Clarification
41	1618465838_Clarification 1	Sr.No 108	As per specification, only conventional Light fittings (CFL/HPSV/incandescent) are called for. Since conventional fittings are getting obselete nowadays, we request NEA to accept & amend LED type fittings.	
42	1618465838_Clarification 1	Sr.No 118	As per referred clause, it is mentioned as "single phase or three phase auto reclosing of 132kV GIS shall be decided during DDE".  As you might be aware, 1-phase reclosing circuit breaker is completely a different product/design compared with 3-phase reclosing design, there will be significant difference in price. Hence please confirm the actual requirement.	Both 1-ph and 3-ph is acceptable
43	1618465838_Clarification 1	Sr.No 287	Though responded in the referred clause of clarification, we once again find that, 33kV feeder for 33kV side of 33/11kV, 6/6MVA transformer is missing in price schedule. Kindly check and revise the BPS accordingly.  Or please confirm whether bidder has to quote the same under item no. F.B1.2-(1.3).	Please quote the item with respective BP items.
44	1618465838_Clarification 1	Sr.No 335	monitoring system for 220kV, 33.33MVA 1-Ph Tranformer alone. Please confirm.  Further, we understand that, Online Monitoring Systems Mentioned in Vol-2, III5-827 are applicable only for 220kV, 33.33MVA 1-Ph Tranformer and bidder's need not supply any online Monitoring systems for 132/33kV, 30MVA & 33/11kV 6/8MVA Transformers. Please confirm.	Please quote the price in BPS for the respective items in Vol III Page 35, item not 11.1 (8 & 9)
			CIVIL QUERIES	
45	Clarification no : 1	Sl.no:255	As per referred clause for filling with borrowed earth item, it is replied that "for cutting/filling, filling with borrowed earth are included in single item. We wish to inform that, the unit cost for cutting/filling with cut earth and unit cost for filling with borrowed earth is having major difference. It is very difficult to include price for both in single item. Request you to provide the separate line item for filling with borrowed earth in price schedule.	Please refer the clarification1
46	Clarification no : 1  Successful bidder shall have to level and have to provide slope protection, bio engineering etc for remaining area too, so that all the area must seems asthetically as well as structurally beautiful and strong as per the standared codes.	Sl.no:150 & 149	As per referred clause, it is indicated that the remaining area is also to be levelled.  Lapang SS:  We wish to inform that, the level difference within the plot is about 85m approx. and the approach road to be taken with suitable gradient from the main road to the substation area. It is presumed that, the site grading will be done only for the Substation area of present and future scope area.  as shown in the hatched portion of S/S plot.  In hin plot shall be utilised for the approach road & be routed with suitable alignment to achieve motorable access. Please confirm.	Please refer the clarification1,

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		Reference Statement in the TS	_	
47	Clarification no: 1  Successful bidder shall have to level and have to provide slope protection, bio englineering et for remaining area too, so that all the area must seems asthetically as well as structurally beautiful and strong as per the standared codes.	Sl.no:150 & 149	As per referred clause, it is indicated that the remaining area is also to be levelled.  Borang SS:  We wish to inform that, the level difference within the plot is about 60m approx. and the approach road to be taken with suitable gradient from the main road to the substation area. It is presumed that, the site grading will be done only for the Substation area of present and future scope area.  as shown in the hatched portion of S/S plot.  In the remaining space within plot shall be utilised for the approach road & be routed with suitable alignment to achieve motorable access.	for remaining portion successful bidder shal have to use for apporach road or to constructive required structure as per the site requirements or the layout provided by the bidder along with leveling, slope protection so that site seems to be astetically beaut as well as structructurally strong.
48	Clarification no: 1 It is in scope of bidder and shall have to give the proposal for the same but the maximum level shall be 2.	Sl.no:149 & 150	Please confirm.  As per referred clause, 1. Lapang: It has been replied that, the proposed SS maximum level shall be 2. However the level difference within the plot is about 85m approx. We presume that, the site grading will be done only for the Substation area of present and future scope area with 2 levels. The site grading for the remaining area (other than SS area) as it is site condition.  2. Borang:  It has been replied that, the proposed SS maximum level shall be 2. However the level difference within the plot is about 60m approx. We presume that, the site grading will be done only for the Substation area of present and future scope area with 2 levels. The site grading for the remaining area (other than SS area) as it is site condition.  please confirm.	other required structure as per the site requirements or the layout provided by the bidder along with leveling, slope protection so that site seems to be asthetically beautif as well as structructurally strong.
49	It is in scope of bidder and shall have to give the proposal for the same but the maximum level shall be 2.	Sl.no:149	Please provide the Global co-ordinates for all the corners for the proposed Lapang & Borang SS. In order to estimate the quantum of civil works.	It is in the scope of sucessful bidder .
50	Clarification no : 1 Only RRM shall have make.	Sl.no:163	For Borang SS: As per referred clarification, for protection work it is replied that, only RRM shall have to make. We presume that, slope protection means earthern emabankment with grass turfing. However the RRM quantity shall be payable under Schedule-4, Part IV-B - Borang 132/33/11kV AIS Substation, sl.no:3.4.8 & Earth embankment quantity shall be payable under Schedule-4, Part IV-B - Borang 132/33/11kV AIS Substation, sl.no:3.4.4. In slope protection work, we need to include the grass turfing quantity only. Please confirm.	slope protection work includes all the work required for slope protection.
	Clarification no : 1	il.no:165	As per clarification no:1, sl.no:165, it is replied that, for side embankment, retaining wall, slope protection works shall be payable under clause of price schedule part iv B item no:3.4.6, 3.4.1, 3.4.12 an d3.3.14 respectively as per site requirement but shall have to approve by NEA/PSC.  We wish to inform that, the above mentioned price schedule sl.nos are not matched with Lapang SS. Please check and re-confirm the same.	For Lapang substaiton it shall be paid under BPS part iv C item no 11,12 and 3,8 but shal have to take the approval from NEA / PSC
S h	successful bidder shall have to level and	Lno:150	As per referred clause, it is replied that Successful bidder shall have to level and have to provide slope protection, bio engineering etc.  We wish to inform that, there is no separate item for Bio engineering work in price schedule for proposed I anang A. Regner SS.	shall be decided during DDE

# Electricity Grid Modernization Project OCB Name: Design, Supply, Installation, Testing and Commissioning of 132 kV Borang - Lapang and 220 kV Lapang - Naubise (Ratmate) 220kV Transmission Line and Associated Substations OCB No: PMD/EGM/P/BNRTLSS-077/78-01 Clarification-2

SI. No.		Reference Statement in the TS		
	Clarification no : 1	Statement in the 15	Query	NEA Park IOL III
53	Successful bidder shall have to level and have to provide slope protection, bio engineering etc for remaining area too, so that all the area must seems asthetically as well as structurally beautiful and strong as p the standared codes.		As per referred clause, it is replied that Successful bidder shall have to level and have to provide slope protection, bio engineering etc.  We wish to inform that, there is no separate item for slope protection work in price schedule fo proposed Lapang SS.  Kindly include the item for slope protection work in price schedule and also provide the detailed specification for the same.	shall be decided during DDE
		TRANSMISSI	ON LINE	
54	Section-6	OPGW Table A-1 (Typical transmission details-Page No-45)	The nominal spans 350 meters and 400 meters, the provided values of design tension at Every day temperature 32°C and full wind condition & maximum sag at 53°C both are same. In general if Span length is changed then accordingly resultant Maximum tension at every day temperature and Maximum sag values will differ. Kindly confirm	Please proceed as per standard practic
55		OPGW	Kindly confirm if any of the below design will be applicable or not provided to the confirmation of the co	Please proceed as per standard practic
56	Vol II B CHAPTER 1- PSR, Page-4 and Single Line Diagram	145kV GIS Bus Coupler	Discrepancy is observed in Volume-II(B) TS document and single line diagram provided for 220/132/33/11kV Lapang (new) GIS substations. In Volume-II(B), Chapter-1, Clause-3 (A) shows 1 no. of 145kV Bus Coupler bay. However, single line diagram didn't show any Bus Coupler bay. We understand that it is missing in the SLD and is the part of present scope of work. Please confirm our understanding is correct and CT's for 145kV GIS Bus Couler shall be as per Chapter-19, Table -3D. Please confirm the same.	Please proceed as per BPS and TS
57		(Typical transmission details-Page No-IIA-316)	For the nominal spans 350 meters and 400 meters, the provided values of design tension at Every day temperature 27°C and full wind condition & maximum sag at 53°C both are same. In generally if Span length is changed then accordingly resultant Maximum tension at every day temperature and Maximum sag values will differ.    Page	Please proceed as per standard practice
i8	Volume I of III, Section 7 GCC, 11. Contract Price	11.1 The Contract Price shall be as specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement. 11.2 Unless an adjustment clause is provided for in the SCC, the Contract Price shall be a firm lump sum not subject to any alteration, except in the event of a Change in the Facilities or as otherwise provided in the Contract. 11.3 Subject to GCC Subclauses 9.2, 10.1, and 35 hereof, the Contractor shall be deemed to have satisfied itself as to the correctness and sufficiency of the Contract Price, which shall, except as otherwise provided for in the Contract, cover all its obligations under the Contract.	Due to the incomplete survey data provided by the Employer, the actual engineering quantity deviates greatly from the BOQ. The contract price could be adjusted accordingly or not?	is per BPS
ig S	Volume III of III, Schedule 4: Installation	The unit price in form "Part IV-A: Borang-Naubise (Ratmate) 220 kV Transmission Line" and "Part IV-B: BORANG 132/33/11 kV AIS Substation" is excluding to the	Please Confirm.	s per BPS
0 5	Contour Survey, Site Levelling, 3.1 Contour Survey&Site Levelling	detailed Engineering stage.	Please confirm if the stepped general layout for Borang Substation and Lapang Substation are accepted according to the terrain.	lease refer clarification 1
1 R	Requirements, chapter14, sub-clause 6.1 tainwater Harvesting	n addition to drainage of rainwater in accordance with above clause 6.0, the contractor shall design, repare drawings and provide rainwater harvesting system also. Rainwater harvesting shall not be done if he depth of underground water table is within 8.0m from finished ground level or as per provision of relevant stritish standard codes (B S Codes) equivalent International Standards. While designing the rain water anvesting system, following points may be taken care of:	Please provide the depth of underground water table in Borang Substation and Lapang Substation in order to confirm if the rainwater harvesting system shall be provided.	ease refer clarification 1

#### Electricity Grid Modernization Project OCB Name: Design, Supply, Installation, Testing and Commissioning of 132 kV Borang - Lapang and 220 kV Lapang - Naubise (Ratmate) 220kV Transmission Line and Associated Substations OCB No: PMIN/EGRIFIENSTILES-077778-01 Clarification-2

SI. No.	Sub-Section/ Clause in TS	Clarification-2		
	Volume II(B) of III, Section 6: Employer's	Reference Statement in the TS	Query	Market Control of the
62	Requirements, chapter14, sub-clause 20.0 Sewerage System (ii)	The Contractor shall construct septic tank and soak pit suitable for 50 users each for control room building, transit camp and township buildings is constructed .If septic and soak pit system is not acceptable by local Nepal Authority, contractor will have to install suitable sewerage system as per local statutory requirement.	Please F. V.	NEA Reply/Clarification  Please refer clarification 1
63	Volume II(B) of III, Annexure-I, Page IIB-29 General Layout of Borang Substation; Page IIB-54 General Layout of Lapang Substation		Please provide the contour map with clear elevation contour line for Borang Substation and Lapang Substation.	
64	Volume II(B) of III	None	Plane provide the	Please refer clarification1
65	Volume II(B) of III, Annexure-I, Page IIB-29		Please provide the survey data for Borang Substation and Lapang Substation.	Please refer clarification1
	General Layout of Borang Substation; Page IIB-54 General Layout of Lapang Substation	Drawing: General Layout of Borang Substation and Lapang Substation	Please provide the land scope and the location of boundary wall for Borang Substation and Lapang Substation.	Shall be decided during DDE
66	Volume II(B) of III, Annexure-I, Page IIB-29 General Layout of Borang Substation; Page IIB-54 General Layout of Lapang Substation	Drawing: General Layout of Borang Substation and Lapang Substation	Please provide the location of adjoining main road and the distance from substation to main road for Borang Substation and Lapang Substation.	Tentative location has been shown in lay but for exact location request you to pleat
67	Volume II(A) of III, SECTION-12 Drawings	The drawings in bidding documents are incomplete.	Please provide the 220kV and 132kV tower foundation drawings for all geological types.	visit the site.
68	Volume II(A) of III, SECTION-12 Drawings	The drawings in bidding documents are incomplete.		It is in the scope of sucessful bidder.
			Please provide complete and clear 220kV and 132kV tower drawings.	shall be provided for successful bidder
69		The work shall include all necessary stone revetments, concreting and earth filling above ground level, the clearing from site of all surplus excavated soil, special measures for protection of foundation close to or in nalas, river bank / bed, undulated terrain, protection of uphill / downhill slopes required for protection of tower etc., including suitable revetment or galvanised wire netting and meshing packed with boulders. The top cover of stone revetment shall be sealed with 1:2.4 nominal mix concrete. Contractor shall recommend protection at such locations wherever required. Details of protection of tower/tower footing are given in drawing enclosed with these specifications for reference purpose only.	Please provide local slope protection drawings for towers.	Shall be decided during DDE
70	Volume II(A) of III	None	Please provide the survey report for transmission lines.	
71 k	V -Transmission Line and Associated Substations-VOLUME:- II(B) OF III-March 2021-Pg 13-15	The main design for 145kV GIS is 3-phase for the whole bay which makes the equipment smaller, saves more space for end user and easy to maintenance. If 3-phase circuit breaker and 1-phase CT/PT/isolator switches/grounding switches/bushings are required, that means extra composetic with	As per the received Clarification 1-compressed no response has been added to	shall be provided for successful bidder  Both 1-ph and 3-ph is acceptable
72 IN	. Section 6: Employer's Requirements/Gas nsulated Switchgear-chapter 19-GAS	The main design for 145kV GIS is 3- phase for the whole bay which is three phaes relclosing, Is that acceptable if the vendor provide three phaes relclosing for GIS as per <technical data="" sheet<br="">19.3&gt;?</technical>	As per the received Clarification 1- No. 6, the response is decide it during DDE. The response was not clear. 1-phase reclosing circuit break is completely another different product compaired with 3-phase reclosing one, which will make a big difference on price. Pls confirm the circuit breaker is 1-phase reclosing or 3-phase reclosing? We prefer 3-phase as per the requirement of TECHNICAL DATA	Both 1-ph and 3-ph is acceptable
73 Cc ar k\ Su	nd 220 kV Lapang - Naubise (Ratmate) 220	As per < Design, Supply, Installation, Testing and Commissioning of 132 kV Borang - Lapang and 220 kV Lapang - Naubise (Ratmate) 220 kV -Transmission Line and Associated Substations-VOLUME:-  (I(B) OF III-March 2021-Pg.131 clasue 9.2>, type test which is witnessed by Utility or representative of	As per the received Clarification 1 No.17, the response is decide it as per ECQ. STL labs have no ability to do full type test as per IEC requirement, so we recommend the end user to take the type test with witness of STL supervisor.	As per EQC
74	r	inde phase and reclaims is a single phase and reclaims is a si	Based on above , is that acceptable if we provide 3-phase GIS for 145kV?	Both 1-ph and 3-ph is acceptable
75	n e		The main design for 145kV GIS is 3- phase for the whole bay which is three phaes relclosing. Is that acceptable if We provide three phaes relclosing for GIS as per <technical bheet-19.3="" data="">?</technical>	oth 1-ph and 3-ph is acceptable

#### Electricity Grid Modernization Project OCB Name: Design, Supply, Installation, Testing and Commissioning of 132 kV Borang - Lapang and 220 kV Lapang - Naubise (Ratmate) 220kV Transmission Line and Associated Substations OCB No: PMD/EGMP/BNRTLSS-0777/8-01 Clarification-2

SI. No.	Sub-Section/ Clause in TS	Reference Statement in the TS		
76		for 3-ph transformer are guired for this state.	Query The quantity of GIS bays and transformers which shown in the layout is inconsistent with the scope description of 4.1 and BOO.	NEA Reply/Clarification
/*		<ol> <li>NOLUME:- II(B) OF III-March 2021-Pg.13-15, 4.1, Pg.58 general layout, Pg.59 sinige line;</li> <li>BOQ-Schedule No. 1: Plant and Equipment including Mandatory Spares to be supplied from abroad;</li> </ol>	scope description of 4.1 and BOQ.  Please clarify and update layout with more details.	Please quote as per BPS
77		As per the scope description of 4.1, 132 kV Auxiliary Bus to connect spare unit of Transformer is required for ICT bay for single phase transformer.	The Auxiliary Bus is not mentioned in Pg.59 sinlge line diagram.	
78		OF III-March 2021-Pg. 13-15, 4.1, Pg.58 general layout, Pg.59 sinige line;  STL type test report is required.	rease clarify and update SLD.	Please refer Page IIB-56
79		As per description of 36KV Insturment transformers 1.4.4 and 1.4.5 in BPS that technical specification should be in technical documents. but use contents for the property of	Type test which is witnessed by Utility or representative of accredited test lab or reputed consultant is acceptable, please confirm.	As per EQC
80		documents. But we can not find out related files.	Could you provide the related technical specification of 36KV instument transformers?	Please refer Chapter-2 GTR and proceed per general standards and codes as per
-		As per descripition of Vollme-11B Charpter 11: DG set , technical parameters of DG is 250/100KVA,	Could you confirm it's correct? Under gernernal condition, the parameters should be	Annexure A
81		7 to per description of 72.5KV Equipment 1.3 and 1.4in RDC that the believe		Please proceed as per standard practices shall be decided during DDE
		The same same same same same same same sam	and a second opening and the second opening a	Diagram of the Control of the Contro
82		1-phase CT/PT/isolator switches/grounding switches/bushings and 3-phase circuit breaker are required for 145kV GIS Design, Supply, Installation, Testing and Commissioning of 132 kV Borang - Lapang and 220 kV Lapang - Naubise (Ratmate) 220 kV -Transmission Line and Associated Substations-VOLUME: II(B) OF III-March 2021-Pg.13-15, 4.1-220/132/33/11kV Lapang, Biharthok (New) GIS Substation	As per the received Clarification 1 communed	
83		Insulated Switchgear-chapter 19-GAS INSULATED SWITCHGEAR-ANNEXURE-1;  2. TECHNICAL DATA SHEET-19.3;	doesn't make sense. 1-phase reclosing circuit break is completely another different product compaired with 3-phase reclosing one, which will make a big difference on price. Pls confirm the circuit breaker is 1-phase reclosing or 2-breakers.	
84		STL type test report is required. 1. Section 3: Evaluationand Qualification Criteria; 2. Design, Supply, Installation, Testing and Commissioning of 132 kV Borang - Lapang and 220 kV Lapang - Naubise (Ratmate) 220 kV -Transmission Line and Associated Substations_VOLUME-	requirement of TECHNICAL DATA SHEET-19.3 and GIS supply scope.  As per the received Clarifocation 1 No.17, the response is decide it as per ECQ. STL labs have no ability to do full type test as per IEC requirement, so we recommend the end user to take the type test with witness of STL supervisor.	

