Nepal Electricity Authority
Project Management Directorate
Khimti-Barhabise-Lapsiphedi 400 kV Substation Project

OCB No.: PMD/PTDSSP/KBL-75/76-01" Design, Supply, Installation and Commissioning of 400 kV Gas Insulated Substations (GIS) at New Khimti, Barhabise and Lapsiphedi"

Set-1

Clarification No. 1					
S.N.	**Vol/Sec**	**Clause**	**Text as per Bid document**	**Bidder's Queries**	**NEA Response**
1	Vol-I, Section-1	ITB 35.2 and BDS	ITB -The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 15. Unless permitted in the BDS, the determination shall not take into consideration the qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, subcontractors (other than Specialist Subcontractors if permitted in the bidding document), or any other firm(s) different from the Bidder. BDS- The qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, subcontractors shall not be permitted.	In case of the carve out ,merger,demerger of companies and a new entity formed due to the same, can you please clarify as to what financial and technical qualification documents need to be submitted by the new entity?	shall be as per the Provision of Bid Documents
2	Vol-I, Section 3 - Evaluation and Qualification Criteria	Clause 2.4.1 - Bidder's Experience	Participation as a contractor, JV partner, or subcontractor, in at least 2 (two) contracts that have been successfully or substantially completed within the last 10 (Ten) years and that are similar to the proposed contract, where the value of the Bidder's participation under each contract exceeds US$ 43 Million each. The similarity of the Bidder's participation shall be based on design, supply, installation and commissioning of 400 kV or above voltage class Gas Insulated Substation (GIS) with minimum 7 (Seven) No. of GIS Bays.	In some countries, standard operating voltage is 380 kV instead of 400 kV. In view of the same, we request you to accept 380 kV rating certificates shall be acceptable, instead of 400 kV.	shall be as per the Provision of Bid Documents
3	Vol-I, Section 3 - Evaluation and Qualification Criteria	Clause 2.5 Subcontractors S.N. 2 (i), GIS (400 kV voltage class)	Must have manufacturing experience of at least 7(seven) years.	Request to consider manufacturing experience of at least 5 (five) years which is acceptable in all central & state utilities in India.	shall be as per the Provision of Bid Documents
4	Vol-I, Section 3 - Evaluation and Qualification Criteria	Clause 2.5 Subcontractors S.N. 2 (iv), GIS (400 kV voltage class)	Must have successfully carried out the complete type 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 400 kV voltage class GIS Switchgears (Circuit Breaker, Disconnector, 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 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.	We understand that "In case of an Indian GIS manufacturer who has not conducted the type testing of 400kV/220kV/145kV GIS manufactured in India but the parent company or subsidiary company or group company or Collaborator have conducted the type testing of 400kV/220kV/145 kV GIS manufactured at their works, the type test reports of the parent company or subsidiary company or group company or Collaborator shall be acceptable provided that the design of the 400kV/220 kV/145kV GIS being offered from Indian works is same as that of GIS manufactured & successful type tested from the parent company or subsidiary company or group. " Kindly confirm the same. Also, request to accept type test period of 10 years as on the originally scheduled date of bid opening because repetition of type test is required when there is any change in design aspect. The same 10 years period of type test is acceptable in all central & state Utilities in India. Kindly accept the same.	shall be as per the Provision of Bid Documents. Regarding type test period refer Amendment no. 1

Clarification No. 1					
S.N.	**Vol/Sec**	**Clause**	**Text as per Bid document**	**Bidder's Queries**	**NEA Response**
5	Vol-I, Section 3 - Evaluation and Qualification Criteria	Clause 2.5 Subcontractors S.N. 1 (iv), Power Transformer (400 kV or higher voltage class)	iv) 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 : - 400 kV voltage class, three phase 315 MVA (or single phase 3 X 105 MVA) Transformer (a) 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 Laboratory without any extra cost to the employer. (b) However, 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)-Accredited Laboratory or in NABL Accredited Laboratory witnessed by - authorized STL and NEA authorized representatives without any extra cost to the Employer.	We wish to suggest the change in QR as follows: • Type test can be done in NABL accredited Lab and witness by STL member officials in NABL accredited Lab. Most of the STL labs has limitation to conduct the Type test for this kind of big ratings like Temperature rise tests. This clause will be unfair even if the transformer is being short circuit tested at KEMA or other STL labs. Hence, we would request you to change the clause as suggested above. •Short circuit test need to be conducted in STL LAB but with no cap on the number of years since the SC design is proven and doesn't depend on # of years.	Provision of Bidding Documents remains unchanged
6	Vol-I, Section 3 - Evaluation and Qualification Criteria	Clause 2.5 Subcontractors S.N. 4 (iv), Reactors(400 kV or higher voltage class)	iv) Must have successfully carried out the complete type test as per IEC over last 7 years period as on the originally scheduled date of bid opening in Reputed Independent International Accredited Testing Laboratory.	Also, in case of Reactors it states that the type test to be conducted at Reputed Independent International Accredited Lab. It is not possible as most of the type tests including the Heat Run test cannot be conducted at CPRI / KEMA. Also, it doesn't define what is the meaning of Reputed Independent International Accredited Lab. We suggest to change it as follows: Type test to be conducted at 'NABL Accredited' Lab and witness by STL member and NEA representative at NABL accredited lab.	shall be as per the Provision of Bid Documents
7	**Common**			Prease provide water supply system docking (list only water supply quantity without corresponding other items) requirements and basic information	Bidder is to quote as per the provision of bid document
8	**Common**			Prease provide drainage system docking (only the amount of drainage pipes in the list without corresponding other items) requirements and basic information	Bidder is to quote as per the provision of bid document
9	**Common**			Please provide fire protection system docking (the list only contains fire control pipeline quantity-lot without corresponding other items) requirements and basic data	Bidder is to quote as per the provision of bid document
10	**Common**			Please provide lighting system docking requirements and basic information	Bidder is to quote as per the provision of bid document
11	**Common**			Please provide lightning protection grounding system requirements and basic data	Bidder is to quote as per the provision of bid document
12	**Common**			Please provide communication system docking requirements and basic data	Shall be provided during detail engineering
13	**Common**			Please provide basic information of the expansion of the existing station (electrical, civil and plane realated civil information)	Bidder is to quote as per the provision of bid document

Clarification No. 1					
S.N.	**Vol/Sec**	**Clause**	**Text as per Bid document**	**Bidder's Queries**	**NEA Response**
14	**Common**			Please specify the project work interface for this period	Bidder is to quote as per the provision of bid document
15	**Common**			AHU System: BOQ only provide a room area without detailed configuration. Please provide existing station design drawings	The design and drawings are in scope of Contractor. Hence same shall be provided by the Contractor during detailed engineering.
16	**Common**			Please provide Soil bearing capacity for civil foundation design	It is under scope of Contractor and shall be finalized during detailed engineering.
17	**Common**			Please provide Soil resistivity value for Earthing system design	It is under scope of Contractor and shall be finalized during detailed engineering.
18	**Common**			Please provide survey drawing (or Geogle map) of the substation plots in Autocad (showing property/boundary limit)	Detail survey is in the present scope of contract
19	**Common**			Please provide DWG files of the Tender SLD and Layout drawings from NEA.	Clearly Visible SLD for all three Substations shall be provided to bidder
20	**Common**			Please provide geotechnical investigation data of Substation plot.	It is under scope of Contractor and shall be finalized during detailed engineering.
21	**Common**			Please provide 220kV GIB details drawing of the interface	Shall be provided during detail engineering
22	**Common**			Please provide existing station main equipment (GIS, Power transformer, Control and Relay Panel, SAS, Communication system etc) company information and existing equipment data.	Shall be provided during detail engineering
23	**Common**			Please confirm with project that the bidder need to supply the digital coupler with rack or same can be mounted inside SDH rack at New Khimti provided space is available.	The DPC shall be housed in separate panel.
24	**Common**			Existing LV cable requirement is too brief. Please provide more LV cable specific parameter requirement.	Bidder is to quote as per the provision of bid document
25	Volume I	Section-3 Evaluation & Qualification Criteria, 2.4.1 Contracts of Similar Size and Nature	Participation as a contractor, JV partner, or subcontractor, in at least 2 (two) contracts that have been successfully or substantially completed within the last 10 (Ten) years and that are similar to the proposed contract, where the value of the Bidder's participation under each contract exceeds US$ 43 Million each. The similarity of the Bidder's participation shall be based on design, supply, installation and commissioning of 400 kV or above voltage class Gas Insulated Substation (GIS) with minimum 7 (Seven) No. of GIS Bays. Out of the two contracts, one should have been executed outside the Bidder's home country.	In many of middle east countries the operating voltage level is 380kV, which is equivalent to 400kV Voltage system. Kindly confirm that the execution experience of 380kV Voltage class GIS Substation contract executed in middle east country will be acceptable for the requirement of 400kV Voltage class experience with other similar qualification experience conditions.	shall be as per the Provision of Bid Documents

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Set-2

Clarification no. 1						
S.No	**Vol/Sec**	**Page No**	**Clause No.**	**Description**	**Bidder's Query**	**NEA Response**
1	Chapter 3 –GIS Switchgear	Page 2 of 63	2	IEC 60044-1 Current transformers IEC 60044-2 Voltage transformers	Revised reference standard for Instrument Transformers IEC 61869-2 Current transformers IEC 61869-3 Voltage transformers Please accept.	Acceptable
2	Chapter 3 –GIS Switchgear	Page 4 of 63	4.4	Due to safety requirement for working on this pressurized equipment, whenever the pressure of the adjacent gas compartment is reduced during maintenance, this compartment shall be designed so that it shall remain in service to perform its intended duty.	The switchgear is desgined to perform its intended and switching duty at rated Gas pressure. However, the same shall perform only the intended duty at reduced pressure and not switching duty. Please accept the same.	Provision of bidding documents remains unchanged
3	Chapter 3 –GIS Switchgear	Page 4 of 63	4.4	The bus enclosure should be sectionalized in a manner that maintenance work on any bus disconnector (when bus and bus disconnector are enclosed in a single enclosure) can be carried out by isolating and evacuating the small effected section and not the entire bus.	We undersand that the bus bar sectionalsiation(gas barriers in the bus bar section) is not required If the bus bar and bus disconnector are not in the same gas comaprtment.Please confirm.	Provision of bidding documents remains unchanged
4	Chapter 3 –GIS Switchgear	Page 4 of 63	4.5	The material and thickness of the enclosures shall be such as to withstand an internal flash over without burn through for a period of 300 ms at rated short time withstand current.	The same shall be as per IEC 62271-203.	Provision of bidding documents remains unchanged
5	Chapter 3 –GIS Switchgear	Page 9 of 63	4.37	UHF sensors for PD detection: Contractor shall provide adequate number of UHF sensors in the offered GIS for detection of Partial discharge (of 5 pC and above) as per IEC 60270 through Partial Discharge (PD) monitoring system and the number and location of these sensors shall be subject to approval of the employer. Further UHF sensors shall necessarily be provided in close proximity to VT compartments. However adequacy of number of sensors and their location shall be verified at site by the contractor as per recommendations of CIGRE task force TF 15/33.03.05 (Task force on Partial discharge detection system for GIS: Sensitivity verification for the UHF method and the acoustic method). In case during site testing additional UHF sensors are required, the same shall also be supplied& installed to complete the technical requirement.	Number of UHF sensors & the location of UHF sensors shall be as per manufactureres' recommendations. Please note that the locations of sensors shall be decided during detailed engineering itself to achieve the desired sensitivety & the same will be reflected on the drawings which will be submited for approval. No change on the same recommended at site. please accept.	Provision of bidding documents remains unchanged
6	Chapter 3 –GIS Switchgear	Page 21 of 63	6.2.12.	The disconnectors and safety grounding switches shall have a mechanical and electrical inter-locks to prevent closing of the grounding switches when isolator switches are in the closed position and to prevent closing of the disconnectors when the grounding switch is in the closed position. Integrally mounted lock when provided shall be equipped with a unique key for such three phase group. Master key is not permitted.	When there is a three position switch (a module having both the switches in it-disconnect switch and earth switch) a mechanical interlock shall be provided,but when the mentioned switches are different modules,practically it can not be made possible to introduce the stated mechanical interlock.The product types that we are considering for the project under discussion have been supplied to and installed at numerous substations in India and abroad. Kindly confirm our understanding.	Provision of bidding documents remains unchanged

Clarification no. 1						
S.No	**Vol/Sec**	**Page No**	**Clause No.**	**Description**	**Bidder's Query**	**NEA Response**
7	Chapter 3 –GIS Switchgear	Page 21 of 61	7.2.	Each safety grounding switch shall be electrically interlocked with its associated disconnectors and circuit breaker such that it can only be closed if both the circuit breaker and disconnectors are in open position. Safety grounding switch shall also be mechanically key interlocked with its associated disconnectors.	The disconnectors and the safety grounding switches are separate modules in GIS design and shall have only electrical inter-locks between them. Please accept.	Provision of bidding documents remains unchanged
8	Chapter 3 –GIS Switchgear	Page 11 of 63	4.41.	SF6 gas shall be tested for purity, dew point, air, hydrolysable fluorides and water contents as per IEC:376, 376A & 376B and test certificates shall be furnished to the owner indicating all test results as per IEC standards for each lot of SF6 gas. Further site tests for moisture, air content, flash point and dielectric strength to be done during commissioning of GIS. Gas bottles should be tested for leakage during receipt at site.	SF6 gas shall be tested for purity, dew point, air, hydrolysable fluorides and water contents as per IEC:376, 376A & 376B and test certificates shall be furnished to the owner indicating all test results as per IEC standards. Kindly accept.	Provision of bidding documents remains unchanged
9	Chapter 3 –GIS Switchgear	Page 15 of 63	5.6.4.	The breaker should be able to withstand all dielectric stresses imposed on it in open condition at lockout pressure continuously (i.e. 2 pu. power frequency voltage across the breaker continuously)	The offered circuit breaker shall be able to withstand rated dielectric stresses imposed on it in open condition at lockout pressure for a duration of 15 min. Request customer to kindly accept ther same	Provision of bidding documents remains unchanged
10	Chapter 3 –GIS Switchgear	Page 26 of 63	10.2	INSULATION CO-ORDINATION AND SELECTION OF SURGE ARRESTER	Any insulation coordination study shall be excluded from scope of supply. However we understand that the LA requiremt is outddor and AIS type surge arrestors are to be quoted as per BPS.	Provision of bidding documents remains unchanged
11	Chapter 3 –GIS Switchgear	Page 39 of 63	22	All transport packages containing critical units viz Circuit breakers and Voltage transformers shall be provided with sufficient number of electronic impact recorders (on returnable basis) during transportation to measure the magnitude and duration of the impact in all three directions. The acceptance criteria and limits of impact in all three directions which can be withstood by the equipment during transportation and handling shall be submitted by the contractor during detailed engineering. The recording shall commence in the factory and must continue till the units reach site. The data of electronic impact recorders shall be downloaded at site and a soft copy of it shall be handed over to Engineer – in –charge. Further, contractor shall communicate the interpretation of the data within three weeks.	Shock indicators shall be provided only for VTs being a sensitive equipments. No electronic imparct recorders are necessary for Circuit Breaker. Please accpet the same.	Provision of bidding documents remains unchanged
12	Sub Contractor Qu	Page 49 of 220	2.5	(iv) Must have successfully carried out the complete type test as per IEC in Short-Circuit Testing Liaison (STL) – Accredited Laboratory on 400 kV voltage class GIS Switchgears (Circuit Breaker, Disconnectors, Grounding Switches, Instrument Transformers, SF6/Air & Oil Bushing etc;). If the manufacturer had not successfully carried out complete type test as per IEC in Short-Circuit Testing Liaison (STL) - Accredited Laboratory as on the originally scheduled date of bid opening, bidder have to submit undertaking letter along with bid to carry out the mentioned test in Short-Circuit Testing Liaison (STL) - Accredited Laboratory from offered Manufacturer without any extra cost to Employer.	The STL is concerned with high voltage transmissions and distribution power equipment (i.e above 1KV A.C and 1.2 KV DC).Their main interest is to guide the member laboratories as to how the applicable IEC standards in relation to short circuit tests and dielectric tests are to be interpreted. Therefore it is required to carry out the above mentioned tests at a laboratory that is a member of the said fraternity. Now, carrying out other tests such as pressure tests on enclosures, endurance tests on different drives etc. at an STL member Lab shall not give any additional weightage to the tests or the decisions that the lab will make as these tests are falling beyond their main objectives. We request your good office to consider the explanation above and accept the same.	Provision of bidding documents remains unchanged

Clarification no. 1						
S.No	**Vol/Sec**	**Page No**	**Clause No.**	**Description**	**Bidder's Query**	**NEA Response**
13	Tender document			Document Precedence	Kindly confirm order of precedence of tender document.	Shall be as per the Provision of Bid Documents
14	Plant Layout			Layout of the plant	Please provide clear PDF or Autocad format of the layout for proper project estimation and to prepare duct routing for 400kV GIS.	Clearly Visible Layout for all three Substations shall be provided to bidder
15	Vol II (Part 1 of 2) Chapter 1- Project Specific Requirement 400kV New Khimti GIS Substation	Page 6	A1.5.5	220 kV (220 kV single or twin, 1C 1200 mm2) XLPE Cables along with accessories and Cable sealing ….	Kindly confirm whether single or twin XLPE cable is to be used.	shall be finalized during detail engineering
16	Vol II (Part 1 of 2) Chapter 1- Project Specific Requirement 400kV New Khimti GIS Substation	Page 6	A1.5.5	220 kV (220 kV single or twin, 1C 1200 mm2) XLPE Cables along with accessories and Cable sealing for interconnection of 220 kV side of 400/220 kV Transformer with existing 220 kV GIS lines bays to be used as 220 kV ICT bays. SF6 to Cable Bushing and cable termination is under the present scope of work.	Kindly confirm the philosphy and Scope of cable termination in existing 220kV GIS. (if applicable) 1. Whether the termination to 220kV GIS be indoor or outdoor? 2. In case termination is indoor kindly provide make of existing GIS. 3. In case of indoor termination kindly confirm whether both male and female part in Bidder scope of supply? 4. In case of indoor termination Please provide technical data of Termination kit of existing GIS 5. Kindly confirm that co-ordination with existing GIS supplier is in Customer scope of supply.	220 kV GIS line bays with 220 kV Bus duct upto 220kV Line Gantry is under construction by current ongoing 220kV Substation Project. Connection from that point to the 220kV side of 400/220kV Transformer by 220kV XLPE Cable is under the scope of this Project. 220 kV GIS termination shall be outdoor.
17	Vol II (Part 1 of 2) Chapter 1- Project Specific Requirement 400kV New Khimti GIS Substation	Page 6	A1.5.8	245 kV, 2000A, 40 kA for 1Sec, Three 1-Phase (isolated) SF6 Gas insulated Bus Duct (GIB)…..	As per the price schedule and drawings given there is no requirement of 220kV GIS bays we understand only 220kV duct is in our scope of supply… If so kindly provide the layout for the same to determine route specific constraint.	Only 220kV GIS duct is in present scope of work. Route shall be finalized during detail engineering
18	Vol II (Part 1 of 2) Chapter 1- Project Specific Requirement 400kV New Khimti GIS Substation	Page 8	A1.5.1.15	….Those monitoring equipment's are required to be integrated with SAS through managed Ethernet switch conforming to IEC 61850. This Ethernet switch shall be provided in MB by the contractor.	Kindly provide location of MB. Also Kindly provide the route and distance of monitoring devices from location alloted for MB.	shall be finalized during detail engineering

Clarification no. 1						
S.No	**Vol/Sec**	**Page No**	**Clause No.**	**Description**	**Bidder's Query**	**NEA Response**
19	Vol II (Part 1 of 2) Chapter 1-Project Specific Requirement 400kV New Barhabise GIS Substation	Page 15	A1.5	220 kV (220 kV single or twin, 1C 1200 mm2) XLPE Cables along with accessories and Cable sealing ….	Kindly confirm whether single or twin XLPE cable is to be used.	shall be finalized during detail engineering
20	Vol II (Part 1 of 2) Chapter 1-Project Specific Requirement 400kV New Barhabise GIS Substation	Page 15	A1.5	220 kV(220 kV single or twin, 1C 1200 mm2) XLPE Cables along with accessories and Cable sealing shall also be used for temporary bypassing of existing 220 kV Incoming/outgoing lines from 220 kV DDE tower/takeoff gantry to 220 kV GIS duct outside 220kV GIS hall as 400 kV GIS switchyard/ building area lies directly under the 220kV TL which connect 220kV GIS switchyard to 220kV DDE. SF6 to Cable Bushing and cable termination is under the present scope of work.	Kindly provide pictorial view of the said connection for ease of understanding. Also kindly clarify the below: 1. Kindly clarify the location and distance of gantry from which tapping is to be made. 2. Kindly provide layout of 220kV side for proper planning. 3. Kindly mention Line loading to decide number of cable runs required at each phase 4. Please clarify whether Surge arrester is required for bypass arrangement? 5. Please clarify whether termination at GIS side to be done outside hall or inside GIS.	In current onging 220 kV substation Project, Incoming and outgoing line from DDE towers to 220kV Line Gantry is planned to be terminated by overhead conductor. That overhead conductors lies directly above the 400kV Switchyard construction area. So, during construction of 400kV Switchyard if that overhead line disturb the work , the same shall be bypassed through 220kV XLPE Cable.
21	Vol II (Part 1 of 2) Chapter 1-Project Specific Requirement 400kV New Barhabise GIS Substation	Page 15	A1.5.8	245 kV, 2000A, 40 kA for 1Sec, Three 1-Phase (isolated) SF6 Gas insulated Bus Duct (GIB)…..	As per the price schedule and drawings given there is no requirement of 220kV GIS bays we understand only 220kV duct is in our scope of supply… If so kindly provide the layout for the same to determine route specific constraint.	Only 220kV GIS duct is in present scope of work. Route shall be finalized during detail engineering
22	Vol II (Part 1 of 2) Chapter 1-Project Specific Requirement 400kV New Barhabise GIS Substation	Page 17	A1.5.2.16	….Those monitoring equipment's are required to be integrated with SAS through managed Ethernet switch conforming to IEC 61850. This Ethernet switch shall be provided in MB by the contractor.	Kindly provide location of MB. Also Kindly provide the route and distance of monitoring devices from location alloted for MB.	shall be finalized during detail engineering

Clarification no. 1						
S.No	**Vol/Sec**	**Page No**	**Clause No.**	**Description**	**Bidder's Query**	**NEA Response**
23	Vol II (Part 1 of 2) Chapter 1- Project Specific Requirement 400kV New Barhabise GIS Substation	Page 15	A1.5.13	Due to space constraint delta formation of autotransformer is not possible by overhead Al-tube arrangement, same shall be done by using 52 kV XLPE cable and deem to be included in the present scope of contract.	Kindly provide specification of 52kV cable.	Bidder shall purpose standard make which meet IEC standard and the same shall be finalized during detailed engineering
24	Vol II (Part 1 of 2) Chapter 1- Project Specific Requirement 400kV New Barhabise GIS Substation	Page 15	A1.5.20	The tapping point location & Existing firefighting system piping layout	Kindly provide distance of tapping point	shall be finalized during detail engineering
25	Vol II (Part 1 of 2) Chapter 1- Project Specific Requirement 400kV New Barhabise GIS Substation	Page 15	A1.5.7	LT switchgear (AC/DC Distribution boards) considering present bays and future bays. Integration of new AC/DC Distribution boards with existing AC/DC Distribution boards (if necessary) is also in present scope of work.	Kindly explain the job covered under integration. Also request to kindly share SLD of existing AC/DC system for proper consideration	As presently, only one LT transformer is envisaged as an incomer-1 of the Main Switch Board, the Incomer-2 of Main switch Board under present scope shall be fed from existing 400V ACDB board located in underconstruction 220 kV Substation Control Room Building.SLD of existing AC/DC system shall be provided during detailed engineering
26	Vol II (Part 1 of 2) Chapter 1- Project Specific Requirement 400kV New Lapsiphedi GIS Substation	Page 23	A1.5	220 kV (220 kV single or twin, 1C 1200 mm2) XLPE Cables along with accessories and Cable sealing ….	Kindly confirm whether single or twin XLPE cable is to be used.	shall be finalized during detail engineering
27	Vol II (Part 1 of 2) Chapter 1- Project Specific Requirement 400kV New Lapsiphedi GIS Substation	Page 23	A1..8	245 kV, 2000A, 40 kA for 1Sec, Three 1-Phase (isolated) SF6 Gas insulated Bus Duct (GIB)…..	As per the price schedule and drawings given there is no requirement of 220kV GIS bays we understand only 220kV duct is in our scope of supply… If so kindly provide the layout for the same to determine route specific constraint.	Only 220kV GIS duct is in present scope of work. Route shall be finalized during detail engineering

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S.No	**Vol/Sec**	**Page No**	**Clause No.**	**Description**	**Bidder's Query**	**NEA Response**
28	Vol II (Part 1 of 2) Chapter 1- Project Specific Requirement 400kV New Lapsiphedi GIS Substation	Page 25	A1.5.3.15	....Those monitoring equipment's are required to be integrated with SAS through managed Ethernet switch conforming to IEC 61850. This Ethernet switch shall be provided in MB by the contractor.	Kindly provide location of MB. Also Kindly provide the route and distance of monitoring devices from location alloted for MB.	shall be finalized during detail engineering
29	Vol II (Part 1 of 2) Chapter 1- Project Specific Requirement 400kV New Lapsiphedi GIS Substation	Page 23	A1.5.20	The tapping point location & Existing firefighting system piping layout	Kindly provide distance of tapping point	shall be finalized during detail engineering
30	Vol II (Part 1 of 2) Chapter 1- Project Specific Requirement 400kV New Lapsiphedi GIS Substation	Page 23	A1.5.7	LT switchgear (AC/DC Distribution boards) considering present bays and future bays. Integration of new AC/DC Distribution boards with existing AC/DC Distribution boards (if necessary) is also in present scope of work.	Kindly explain the job covered under integration. Also request to kindly share SLD of existing AC/DC system for proper consideration	As presently, only one LT transformer is envisaged as an incomer-1 of the Main Switch Board, the Incomer-2 of Main switch Board under present scope shall be fed from existing 400V ACDB board located in underconstruction 220 kV Substation Control Room Building.SLD of existing AC/DC system shall be provided during detailed engineering
31	Chapter 1- Project Specific requirements	Page 10	Clause No. C.1-d)	GIS Buildings including control room cum administrative building. The size of 400kV GIS Building shall be suitable to accommodate five numbers bays in addition to the maintenance bay. The GIS hall shall be suitable for mounting of EOT crane. The GIS and control room building shall be of Pre-Engineered steel structure as per Section "Civil".	Request NEA to clarify that control room cum administrative building is not under present scope of works for all 3 stations.	Control room cum administrative building is not envisaged under present scope of works for all 3 stations.
32	Chapter 1- Project Specific requirements	Page 10	Clause No. C.1-d)	Soil investigation, contouring, leveling and filling. Contouring and site leveling works; The substation area shall be developed in terraces at single or multi levels by cutting and filling. The finished ground level shall be decided during detail engineering based on spot levels and highest flood level if applicable.	As all of 3 stations are existing/ongoing stations,Request NEA to provide us contour map and soil investigation report for all 3 stations.	Detail survey is in the present scope of contract.
33	Chapter 1- Project Specific requirements	Page 10	Clause No. C.1-n)	Soil investigation, contouring, leveling and filling. Contouring and site leveling works; The substation area shall be developed in terraces at single or multi levels by cutting and filling. The finished ground level shall be decided during detail engineering based on spot levels and highest flood level if applicable.	As all of 3 stations are existing/ongoing stations,we understand that Finished ground level of existing stations shall be considered as Finished ground level for proposed 400kV GIS station area for all 3 stations.Please confirm.	shall be finalized during detail engineering.

Clarification no. 1						
S.No	**Vol/Sec**	**Page No**	**Clause No.**	**Description**	**Bidder's Query**	**NEA Response**
34	Chapter 1-Project Specific requirements	Page 30	Clause No. 3.0	The conditions of roads, capacity of bridges, culverts etc. in the route shall also be assessed by the bidders. The scope of any necessary modification/ extension/improvement to existing road, bridges, culverts etc. shall be included in the scope of bidder. 3.0 SPECIFIC EXCLUSIONS The following items of work are specifically excluded from the scope of the specification: (a) Employer's site office and stores. (b) Approach Road up to Substation boundary (c) Boundary wall along substation	Clause No. 2.1 and Clause no .3 are contradictory. We understand that suitable approach road till the proposed area shall be provided by Customer.Please confirm.	Approach road till the sub-station boundary from main highway is not envisaged under Bidder's scope of works
35	Chapter 1-Project Specific requirements	Page 33	Clause No. 2.0	2.0 Foundations 2.1 The foundation shall generally be of open cast type. Reinforced Cement concrete footing shall be used for all types of towers in conformity with the present day practices and the specification laid herein. Footings for all the four legs (without unequal chimney extension) of the tower and their extension shall be similar, irrespective of down thrust and uplift.	Request NEA to clarify that the specifications provided herein for Tower foundations in Annexure VII are for Sub-station towers only. No transmission line or other type of towers are under present scope of work.Please confirm.	The specification provided is for 400kV Double Dead End tower to be constructed within Substation boundary. Please refer Vol II, Chapter-1 PSR Clause 11 Specific Requirement item no. 9, page-35
36	Chapter 1-Project Specific requirements	Page 33	Clause No. 17	Retaining Wall: Retaining wall shall be provided along the periphery of the switchyard and residential area as required by the topography of the area. PCC (1:2:4) shall be provide on the foundation of retaining wall. The retaining wall shall be of RCC cantilever type, consisting of M25 concrete and reinforcement.	As per Bill of Quantities for civil works,Retaining wall is Random rubble masonary type but specification requires the same to be RCC type.Plesae clarify.	Bidder is to quote as per BPS
37	Chapter 1-Project Specific requirements/Clause No. 2.1 & 3			The conditions of roads, capacity of bridges, culverts etc. in the route shall also be assessed by the bidders. The scope of any necessary modification/ extension/improvement to existing road, bridges, culverts etc. shall be included in the scope of bidder. 3.0 SPECIFIC EXCLUSIONS The following items of work are specifically excluded from the scope of the specification: (a) Employer's site office and stores. (b) Approach Road up to Substation boundary (c) Boundary wall along substation	a) As boundary wall is under specific exclusions, we understand that retaining wall works if required under boundary wall are not under present scope of works.Please clarify. B) We understand that retaining wall works are limited to 400kV GIS area under present scope only.Please clarify.	Bidder is to quote as per provision of bidding documents.
38	Electrical Layout-Khimti,Barabhise,Lapsiphedi			Plot Plan dimensions	Request NEA to provide us the plan dimensions for the area under present scope.	shall be finalized during detail engineering.
39	Electrical Layout-Khimti,Barabhise,Lapsiphedi			Furture transformers/reactors	We understand that foundations for transformers/reactors marked as future are not under present scope.Please confirm.	Please refer Amendment no. -1 regarding revised quantity of Transformer to confirm the number of foundations under present scope.

Clarification no. 1						
S.No	**Vol/Sec**	**Page No**	**Clause No.**	**Description**	**Bidder's Query**	**NEA Response**
40	Chapter16-Civil Works/Clause No. 11-8)			If pile foundations are adopted, the same shall be cast-in-situ driven/bored or pre-cast or under reamed type as per relevant parts of relevant British Standard codes (B S Codes)/ equivalent International Standards. Only RCC piles shall be provided.	We understand that Pile foundations are not required for this job. In case same is required, separate line item for same shall be made and rates shall be decided mutually.Bidder shall be compensated commercially and timely.	Bidder is to quote as per the provision of Bidding document
41	Electrical Layout-Khimti,Barabhise ,Lapsiphedi			Scope of works	We understand that any type of works such as leveling works,road works,drainage works,gravelling,PCC etc. for the future area shown in layout are not under present scope of works.Please confirm.	Bidder is to quote as per the provision of Bidding document
42	Electrical Layout-Khimti,Barabhise ,Lapsiphedi			Layout change/optimization	We understand that layout provided herein are tentative only. Layout arrangement can be changed considering technical requirements.Please confirm.	Bidders understanding is generally in order and Layout arrangement can be changed considering technical requirements during detail engineering.
43	Electrical Layout-Khimti,Barabhise ,Lapsiphedi			Approach for area under present scope	We understand that separate approach road for proposed 400kV GIS area shall be provided to us other than existing approach roads to 220/132kV GIS area.Please confirm.	Contrator shall have to use available approach road within substation boundary for proposed 400 kV GIS area. Space(if available) shall be provided for Separate temporary approach road.
44	Electrical Layout-Khimti,Barabhise ,Lapsiphedi			Distance of Exisitng control room from Present area under scope	Request NEA to specify the distance of exisitng control room building from proposed area for 400kV GIS stations for all 3 sites.	shall be provided during detail engineering
45	Electrical Layout-Khimti,Barabhise ,Lapsiphedi			Land acquisition	We understand that proposed land for all 3 sites is fully acquired by NEA.Please confirm.	Bidders understanding is generally in order
46	Electrical Layout-Khimti			Canal	Canal has been shown in Khmiti General arrangement Layout.We understand that in case of any diversion required for the same,it shall be done by Customer.Same is not in scope of bidder.Please clarify.	Bidders understanding is generally in order
47	Electrical Layout-Khimti,Barabhise ,Lapsiphedi			Completion time for existing Stations	Request NEA to provide us tentative completion timelines for existing works under progress in all 3 stations for planning of interconnections.	Construction works in all 3 substations is underway by NEA's another project and is expected to complete on time.
48	General			Approved Brand list	Request NEA to provide us list of approved brands for cement,reinforcement steel,structural steel,tiles and sanitary items.	No approved brands. Bidders shall propose and get tested in the presence of Employer/Consultant Representative inline with Technical Specifications.
49	General			Site office	We understand that space for site office and stores for both the stations shall be provided to us near the area under present scope of works.Please confirm.	Shall be as per the Provision of Bid Documents
50	General			Hinderance Register	Hinderance register shall be maintained by us at site which shall include the delays due to force majures,natural calmaities etc. and extension/compensation shall be provided to us for the same.	Shall be as per the Provision of Bid Documents

Clarification no. 1						
S.No	**Vol/Sec**	**Page No**	**Clause No.**	**Description**	**Bidder's Query**	**NEA Response**
51	General			RMC	We understand that RMC shall be allowed for construction purpose.Plesae clarify.	Yes, However the RMC shall meet the quality requirement stipulated in the technical specifications and relevant standard mentioned in the Bid. Also RMC shall be prepared in presence of the Project representatives.
52	Volume 2			Single Line Diagram	Single Line Diagram is not visible as per the tender documents. Please provide the SLD for all the three Substations.	Clearly Visible SLD for all three Substations shall be provided to bidder
53	Volume 2			PSR - A-1.5,13	We understand that we have to integrate the new bays into the existing SAS at all three sites (New Khimti, Barhsbise and Lapsiphedi). Please provide the details of existing SAS, (Make and model) and also confirm whether it has future extandability provision.	Make and model of existing SAS shall be provided during detail engineering
54	Volume 2			Clause 26.1 of C&R Chapter-17	We understand the Centralised low impedance busbar protection relay at each voltage level, which can cater the bus configuration is acceptable.	Bidders understanding is generally in order.
55	Volume 2				We understand that we have to provide New SAS system as per BPS for the 400kV System at all three substations. Please confirm the location in the control room where this HMI/SAS Panels will be placed.	Bidder understanding is generally in order. Location of SMI/SAS shall be finalized during detail engineering
56	Volume 2			PSR	Please confirm that we have to update the existing SAS already available at 220kv level and we have to integrate it with 400kV.	Bidders understanding is generally in order.
57	General				Please Confirm space availabilty in existing control room. Also proved specification of existing panels which are already placed in existing control room.	Bidders understanding is generally in order. Specifications of existing panels shall be provided during detail engineering
58	Section 8	SCC 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.	**Please clarify the below two points:** **1) 6 months delivery is not possible for all equipments. We confirm prompt supply of spares within a reasonable period. Please accept.** **2) Blueprnits of spare parts are intellectual property of the manufacturers. We understand that only the non-IPR related drawings/as-built drawings need to be provided under this clause for the purpose of identification of spare parts. Please confirm.** **functionally equivalent spare parts shall also be acceptable.**	Provision of bidding documents remains unchanged

Clarification no. 1						
S.No	**Vol/Sec**	**Page No**	**Clause No.**	**Description**	**Bidder's Query**	**NEA Response**
59	Section 8	SCC 14		Additional Clause (Taxes & Duties)	**Please add to the end of the paragraph as below:** **Custom Duty shall be issued to the Authorities within 3 days of submission of request for Duty payment by Contractor. In case of delay by Employer, the Contractor shall be entitled to time & cost reimbursement.Any detension or Demurrage due to delay in issuance of Custom Duty payment should be borne by the Employer based on the documentary evidence provided by the Contractor.**	Provision of bidding documents remains unchanged
60	Section 8	SCC 14		Additional Clause (Taxes & Duties)	**Please confirm on the following:** **1. We understand that as per Nepal law 1.5% TDS is applicable to contractors i.e. TDS will be deducted on entire contract value If the Bidder has the VAT registeration in Nepal .** **2. In case there is a favorable Double Taxation Avoidance Agreement (DTAA) between Government of Nepal and contractor's country (India) then TDS as per provisions of DTAA will be deducted i.e. TDS will be deducted only on payments made for local construction and erection work. No TDS will be deducted on payments made for supplies from outside Nepal., Whether any tax/charges would be deducted by the customer while remitting the payments for offshore supplies.** **Kindly confirm our understanding for above point 1 & 2.**	No your understanding is not correct. & complete. TDS shall be as per the prevailing law of Nepal. Please acquire the required thorough information regarding TDS from Inland Revenue Department (IRD) as well as concerned competent government authorities.

Clarification no. 1						
S.No	**Vol/Sec**	**Page No**	**Clause No.**	**Description**	**Bidder's Query**	**NEA Response**
61	Section 7 and 8	GCC 27 and SCC 27		GCC 27.2 The Defect Liability Period shall be 540 days from the date of Completion of the Facilities (or any part thereof) or one year from the date of Operational Acceptance of the Facilities (or any part thereof), whichever first occurs, unless specified otherwise in the SCC pursuant to GCC Sub-Clause 27.10. GCC27.10 In addition, any such component of the Facilities and during the period of time as may be specified in the SCC shall be subject to an extended Defect Liability Period. Such obligation of the Contractor shall be in addition to the Defect Liability Period specified under GCC Sub-Clause 27.2. SCC 27. Defect Liability 27.10 The critical components covered under the extended defect liability are GIS, Power/Auto Transformers, Substation Automation System(SAS) and the period shall be 3 (three) years.	Request for the modification in the existing clause: GCC 27.2 The Defect Liability Period shall be 540 days from the date of Completion of the Facilities (or any part thereof) or one year from the date of Operational Acceptance of the Facilities (or any part thereof), whichever first occurs, unless specified otherwise in the SCC pursuant to GCC Sub-Clause 27.10. GCC27.10 In addition, any such component of the Facilities and during the period of time as may be specified in the SCC shall be subject to an extended Defect Liability Period. Such obligation of the Contractor shall be in addition to the Defect Liability Period specified under GCC Sub-Clause 27.2. SCC 27. Defect Liability 27.10 The critical components covered under the extended defect liability are GIS, Power/Auto Transformers, Substation Automation System(SAS) and the period shall be 3 (three) years.	Provision of bidding documents remains unchanged
62	Section 9	Contract Agreement		3.1 Effective Date (Reference GCC Clause 1) The Effective Date upon which the period until the Time for Completion of the Facilities shall be counted from is the date when all of the following conditions have been fulfilled: (a) This Contract Agreement has been duly executed for and on behalf of the Employer and the Contractor. (b) The Contractor has submitted to the Employer the performance security and the advance payment guarantee. (c) The Employer has paid the Contractor the advance payment. (d) The Contractor has been advised that the documentary credit referred to in Article 2.2 above has been issued in its favor. Each party shall use its best efforts to fulfill the above conditions for which it is responsible as soon as practicable.	Please modify the clause as below: The Effective Date upon which the period until the Time for Completion of the Facilities shall be counted from is the date when all of the following conditions have been fulfilled: (a) This Contract Agreement has been duly executed for and on behalf of the Employer and the Contractor. (b) The Contractor has submitted to the Employer the performance security and the advance payment guarantee. (c) The Employer has paid the Contractor the advance payment for onshore and offshore portion (d) The Contractor has been advised that the documentary credit referred to in Article 2.2 above has been issued in its favor. (e) The employer has established letter of credit for re-imbursement of payment to contractor full value of contract. (f) The Employer handed over clear sites including necessary permits. Each party shall use its best efforts to fulfill the above conditions for which it is responsible as soon as practicable.	Provision of bidding documents remains unchanged
63	Additional clause	Additional clause		Land Avaialbility	**Please confirm whether land is acquired or not by the customer.**	Land is acquired

Clarification no. 1						
S.No	**Vol/Sec**	**Page No**	**Clause No.**	**Description**	**Bidder's Query**	**NEA Response**
64	Additional clause	Additional clause		Additional Clause on Interest Cost	The invoices shall be settled immediately when due for payment. If Employer is in default with respect to the agreed terms of payment, it shall be liable, to pay default interest, from the due date of payment at a rate of 13% p.a. on the amount that have not been paid by the Employer.	Provision of bidding documents remains unchanged
65	Additional clause	Additional clause		Additional Clause on Storage Cost	If dispatch or delivery is delayed at Employer's request or due to reason attributable to Employer by more than one month after notice was given of the readiness for dispatch by Bidder/ Contractor, Employer may be charged storage costs for each month thereafter up to the amount of 0.5 % of the Subcontract price of the Works but in no event shall the aggregate storage charges exceed a total of 5% of the total Subcontract price. Thereafter, the Contract shall be deemed to be terminated at the option of Bidder/ Contractor. Bidder/ Contractor shall be free to dispose of the supply and recover damages from Employer.	Provision of bidding documents remains unchanged
66	Additional clause	Additional clause		Funding Details required	**Request you to confirm whether the complete payments involved in the project would be coming from Asian Development Bank**	shall be as per the provision of bid document
67	Section- 1 and 2	ITB and BDS		ITB 39.5 If the Bid, which results in the lowest Evaluated Bid Price, is seriously unbalanced or front loaded in the opinion of the Employer, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Price Schedules, to demonstrate the internal consistency of those prices with the methods and time schedule proposed. After evaluation of the price analyses, taking into consideration the terms of payments, the Employer may require that the amount of the performance security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.	**We understand that Performance bank guarantee applicable for the complete project is 10% of the contract value valid till warranty period. Please confirm.**	Please refer the Vol I Section 8 - SCC Clause 13 Securities
68	Section 7	GCC30		30.1 Except in cases of criminal negligence or willful misconduct: (a) the Contractor shall not be liable to the Employer, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Contractor to pay liquidated damages to the Employer, and	Please modify the existing clause as mentioned below: Except in cases of criminal negligence or willful misconduct: (a)the Contractor shall not be liable to the Employer, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, interuptions of operations or loss of use, loss of production, or loss of profits or interest costs, cost of captital,loss of power, and cost of purchased or replacement power,loss of information and data, and damages based on the customer's third party contracts provided that this exclusion shall not apply to any obligation of the Contractor to pay liquidated damages to the Employer, and	Provision of bidding documents remains unchanged

Clarification no. 1						
S.No	**Vol/Sec**	**Page No**	**Clause No.**	**Description**	**Bidder's Query**	**NEA Response**
69	Section 7	GCC30		30.1 Except in cases of criminal negligence or willful misconduct, (a) the Contractor shall not be liable to the Employer, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Contractor to pay liquidated damages to the Employer, and (b) the aggregate liability of the Contractor to the Employer, whether under the Contract, in tort or otherwise, shall not exceed a multiple of the Contract Price specified in the SCC or, if a multiple is not so specified, the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Contractor to indemnify the Employer with respect to patent infringement.	**The Bidder requests that the Liability per event of occurrence shall be limited to USD 1 Mio. Total Liability of the project shall be limited to the Contract Value.**	Provision of bidding documents remains unchanged
70	Additional clause	Additional clause		Foreign Exchange	**Bidder requests that any changes in the cost of the project resulting from changes in the rates for major Foreign Currencies shall be borne by the Customer. Foreign exchange variations shall be provided to the Bidder against submission of documentary evidence.** **Further the Bidder shall provide the Foreign exchange rates as taken at the time of bidding of the project.**	Provision of Bidding Documents remains unchanged
71	Section 7	GCC 7.3		In addition to the supply of Mandatory Spare Parts included in the Contract, the Contractor agrees to supply spare parts required for the operation and maintenance of the Facilities for the period specified in the SCC and the provisions, if any, specified in the SCC	Bidder requests for the modification of said clause as given below: In addition to the supply of Mandatory Spare Parts included in the Contract, the Contractor agrees to supply spare parts, or functionally equivalent spare parts, required for the operation and maintenance of the Facilities for the period specified in the PC and the provisions, if any, specified in the SCC.	Provision of Bidding Documents remains unchanged
72	Section 7	GCC 14.4		For the purpose of the Contract, it is agreed that the Contract Price specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement is based on the taxes, duties, levies and charges prevailing at the date 28 days prior to the date of bid submission in the country where the Site is located (hereinafter called "Tax" in this GCC Sub-Clause 14.4). If any rates of Tax are increased or decreased, a new Tax is introduced, an existing Tax is abolished, or any change in interpretation or application of any Tax occurs in the course of the performance of Contract, which was or will be assessed on the Contractor, Subcontractors or their employees in connection with performance of the Contract, an equitable adjustment of the Contract Price shall be made to fully take into account any such change by addition to the Contract Price or deduction therefrom, as the case may be, in accordance with GCC Clause 36 hereof.	Bidder requests for the modification of said clause as given below: For the purpose of the Contract, it is agreed that the Contract Price specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement is based on the taxes, duties, levies and charges prevailing at the date 28 days prior to the date of bid submission in the country where the Site is located (hereinafter called "Tax" in this GCC Sub-Clause 14.4). If any rates of Tax are increased or decreased, a new Tax is introduced, an existing Tax is abolished, or any change in interpretation or application of any Tax occurs in the course of the performance of Contract, which was or will be assessed on the Contractor, Subcontractors or their employees in connection with performance of the Contract, an equitable adjustment of the Contract Price shall be made to fully take into account any such change by addition to the Contract Price or deduction therefrom, as the case may be, in accordance with GCC Clause 36 hereof.	Provision of Bidding Documents remains unchanged

Clarification no. 1						
S.No	**Vol/Sec**	**Page No**	**Clause No.**	**Description**	**Bidder's Query**	**NEA Response**
73	Section 7	GCC 26.2		If the Contractor fails to attain Completion of the Facilities or any part thereof within the Time for Completion or any extension thereof under GCC Clause 40, the Contractor shall pay to the Employer liquidated damages in the amount specified in the SCC as a percentage rate of the Contract Price or the relevant part thereof. The aggregate amount of such liquidated damages shall in no event exceed the amount specified as "Maximum" in the SCC as a percentage rate of the Contract Price. Once the "Maximum" is reached, the Employer may consider termination of the Contract, pursuant to GCC Sub-Clause 42.2.2.	**Bidder request for confirmation that such liquidated damages would be levied on the contractor if the Contractor fails to attain completion of facilities or any part thereof within the Time of Completion for the reasons/delay caused by Contractors fault.** **Contractor shall not be charged liquidated damages for the reasons that are not attributable to him**	Provision of Bidding Documents remains unchanged
74	Additional clause	Additional clause		Contractor's responsibilities	**Please confirm:** **1. Contractor will provide technical support/ assistance to Employer for taking all necessary approvals, permits & licences from all local, state or national government authorities or public service undertakings or other competent authorities.** **Contractor shall be responsible for only those permits that has to be taken in his own name.** **All necessary fees for such approvals shall be paid by Employer only.**	Provision of Bidding Documents remains unchanged
75	Section 9	Terms of Payments		Payment terms	**We understand that letter of credit shall be opened at the time of contract signing for the full value of contract.Please onfirm.**	Bidders undestanding is not correct. Employer shall establish Letter of Credit within reasonable period after receiving the required documents and performa invoice from the Contractor.
76	Section 9	Terms of Payments		Payment terms	**Please advise the duration in which the L/C will be established by Employer in favour of Contractor.**	Employer shall establish Letter of Credit within reasonable period after receiving the required documents and performa invoice from the Contractor.

Clarification no. 1						
S.No	**Vol/Sec**	**Page No**	**Clause No.**	**Description**	**Bidder's Query**	**NEA Response**
77	Section 9	GCC		GCC 24 Completion of Facilities	**Following Completion and Deemed Completion clause to be added to the Conditions:** **(a) As soon as the Contractor achieves the Works Completion of the contract works, it shall issue to the Employer a notice (Notice of Works Completion) informing about the completion of the work.** **(b) Within 14 days following receipt of the notice of works completion, the Employer shall issue the Completion Certificate to Contractor, failure to which it shall be considered that the work has been successfully completed as on the date of the contractor's notice & Deemed Completion Certificate will be considered to have been issued.** **(c) Completion is also deemed to have taken place if the Works or any part thereof are put to use by the Employer.** **(d) If Commissioning is delayed due to reasons not attributable to Contractor, Contractor shall be allowed to demobilize the site after 2 months waiting and shall provide commissioning support as & when required. Consequently retention payment (if any) to be released against BG.** **The Defect Liability Period shall be deemed to have be started from the date of the such Deemed Completion Certificate.**	Provision of Bidding Documents remains unchanged
78	Section 8	SCC		SCC 9 Contrcator's Responsibilities (c) The Contractor shall comply .....s required for their respective responsibilities and duties. (d) The Contractor shall make available a budget for all such environmental and social measures relevant t.....verse attention of outside parties, created substantial adverse media/press reports or (c) Gives rise to material potential liabilities. (d) The Contractor shall also inform the Employer of any measures taken to mitigate or remedy the effects or cause of such events. SCC 47 (a) establish an operational system for managing environmental impacts, (b) carry out all of the monitoring and mitigation measures set forth in the Initial Environmental Examination (IEE) or Environmental Management Plan (EMP) and (c) allocate the budget required to ensure... comply with (i) the measures and requirements set f..... as Appendix xxx; and (ii) any corrective or preventiv..... requirements and actions."	Referring to the SCC 9 and 47, Kindly provide us in details what permits and approvals are to be taken by Contractor. Also let us know in details what are these terms like IEE, SEP,ESMP,LACP,EMP mentioned in this clause and please share the related plans for contracator to comply.	shall be as per the Provision of Bid documents
79	Additional clause	Additional clause		Additional clause	We understand that Contractor shall not be responsible for ant statutory approvals,tree cutting, forest clearance, site clearances,access to site and right of way. The same shall be in scope of Employer.	shall be as per the Provision of Bid documents

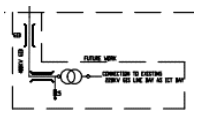
Clarification no. 1						
S.No	**Vol/Sec**	**Page No**	**Clause No.**	**Description**	**Bidder's Query**	**NEA Response**
80	Section- 1 and 2	ITB and BDS		ITB 16.1 (b) The period following completion of plant and services in accordance with provisions of the contract shall be 5 Years	**Bidder request you to remove this clause from the tender document**	Provision of Bidding Documents remains unchanged
81	Additional clause	Additional clause		Bid validity	**If the award is delayed by a period exceeding forty-five (45) days beyond the expiry of the initial Bid validity, the Contract Price shall be determined as follows:** **The Contract Price shall be adjusted by a factor reflecting local inflation during the period of extension and the foreign currency portion of the fixed portion of the Contract Price shall be adjusted by a factor reflecting the international inflation (in the country of the foreign currency) during the period of extension.**	Provision of Bidding Documents remains unchanged
82	Section 8	SCC 13.3.5		Performance Bank Guarantee	**If the Bidder price is below 15% of the cost estimate, then the Bidder needs to provide the Performance Security as per the formula provided in the Tender document, to calculate the Performance security value, request you to please clarify/provide the following:** **a) Provide the Approved Cost Estimate for the project?,** **b) We understand that VAT is exempted for this project so not VAT will be added.Please confirm,** **c) Please confirm the percentage of performance security in the contract.**	shall be as per the Provision of Bid documents

Nepal Electricity Authority
Project Management Directorate
Khimti-Barhabise-Lapsiphedi 400 kV Substation Project

OCB No.: PMD/PTDSSP/KBL-75/76-01" Design, Supply, Installation and Commissioning of 400 kV Gas Insulated Substations (GIS) at New Khimti, Barhabise and Lapsiphedi"

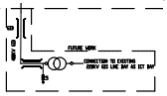
Set-3

Clarification no. 1						
S. N.	**Substation**	**Volume / Section**	**Clause Number**	**Description**	**Bidder's Queries**	**NEA Response**
1	Khimti / Barhabise / Lapsiphedi	BPS & Project Specific Requirement	-	-	In case of any discrepancy between Project Specific Requirement and Bid Price Schedule, Price Schedule will prevail. Please confirm.	Following is the order of preference 1. Project Specific Requirement 2. Bid Price Schedule 3.Vol II (except PSR)
2	Khimti / Barhabise / Lapsiphedi	Vol-II (Part 1 of 2)_KBL & SLD	-	Spare Transformer Switching.	AS per Chapter -5 Clause No. 9.1 of Vol-II., Switching of spare transformer (400kV Side)is considered inside the GIS. However the same is not reflecting in the SLD. Please confirm the actual requirement.	Isolator switching of spare transformer is not envisaged under present scope of work.
3	Khimti / Barhabise / Lapsiphedi	Vol-II (Part 1 of 2)_KBL & SLD	-	Spare Transformer Switching.	Spare Transformer Switching scheme at 220KV side is not clarified in the specification. Also Necessry AIS type LA **etc** are not considred in the BPS. Please clarify the actual requirement.	Isolator switching of spare transformer is not envisaged in present scope of work.
4	Khimti / Barhabise / Lapsiphedi	1558513179_Vol II(Part 1 of 2)_KBL & SLD	-	Transformer Connection	We understand that the transformer connections for both 400KV & 220KV sides will be done with the conductor being terminated at SF6 bushing of GIB at one end and Oil to Air bushing of the transformer at the other end. Please confirm.	shall be as per the Provision of Bid documents
5	Khimti / Barhabise / Lapsiphedi	BPS	Sr. No. E,1	336KV Surge Arrester (1-phase)	As per BPS only 12 Nos. LA are considred. We understand that these should be 13 Nos. (6 for line +3 for present ICT + 3 for future ICT + 1 for Spare ICT). Please confirm the actual requirement and provide the revised SLD and Layout.	Bidder is to quote as per BPS
6	Khimti / Barhabise / Lapsiphedi	BPS	Sr. No. F,1	216KV Surge Arrester (1-phase)	As per the BPS only 6 Nos. LA are considred. We understand that these should be 7 Nos. (3 for present ICT + 3 for future ICT + 1 for Spare ICT). Please confirm the requirement and provide the revised SLD and Layout.	Bidder is to quote as per BPS
7	Khimti	Chapter 1 –Project Specific Requirement & SLD	Clause No. 1.4 (A.ii)	2 nos. bays for connecting each bank of 315 MVA, 400/220 kV Auto Transformers formed with 4 numbers(400/√3)/(220/√3/33) kV,105MVA, single phase auto transformers with one number unit as spare (under construction 220 kV line bays shall be use for 220 kV side ICT bays) along with supply and installation of autotransformers. Supply & Installation of 4 x 105MVA Autotransformers is under present scope and 3 x 105 MVA shall be connected in future.	We understand that the Gas Insulated Busduct and Sf6 to Air Bushing for future transformer is considered in the present scope. But as per SLD it is indicated as future work. Please clarify.	Bidder is to quote as per BPS

Clarification no. 1						
S. N.	**Substation**	**Volume / Section**	**Clause Number**	**Description**	**Bidder's Queries**	**NEA Response**
8	Khimti / Barhabise / Lapsiphedi	Chapter 3 –GIS Switchgear	Clasue No. 13.1.5	In case of single phase transformers are being installed in the substation, HV &IV auxiliary bus for the transformer bank for connecting spare unit shall be formed inside the GIS hall as per the SLD furnished and as specified in Chapter 1-PSR .	An Auxiliary Bus is to be constructed inside the GIS, but as Per BPS no SF6 To Air Bushing and GIB is considered for the Spare Transformer Bank. Kindly confirm the actual requirement and provide the quantity amendment for LA , BPI and SF6 to Air Bushing. 	Isolator switching of spare transformer is not envisaged in present scope of work.
9	Khimti / Barhabise	1558513179_Drawings	Layout Khmti-GIS-Layout-02(A)	400kV GIS New Khimti Substation Dwg. No. NEW KHIMTI-GIS-LAYOUT-02(A)	The connectivity of 220kV Switchyard from the ICT is not clear from the layout. Please provide a revised layout for the same.	220 kV GIS line bays with 220 kV Bus duct upto 220kV Line Gantry is under construction by current ongoing 220kV Substation Project. Connection from that point to the 220kV side of 400/220kV Transformer by 220kV XLPE Cable is under the scope of this Project.
10	Khimti / Barhabise / Lapsiphedi	BPS	Sr. No. A,e,i) & ii)	A. 400kV SF6 GIS e) SF6 Gas Insulated Bus Duct (GIB) outside GIS hall along with support structure and accessories 4000A - 300M 2000A - 200M	We understand that the GIB inside the building shall be a part of the GIB bay module.	Bidder understanding is generally in order.
11	Khimti / Barhabise / Lapsiphedi	BPS	Sr. No. B,a.1	B. 220kV SF6 GI a) SF6 Gas Insulated Bus Duct (GIB) outside GIS hall along with support structure and accessories 2000A - 360M	We understand that the GIB inside the building shall be a part of the GIB bay module.	Bidder understanding is generally in order.
12	Khimti / Barhabise / Lapsiphedi	1558513179_Drawings	Price Schedule	H. Erection Hardware H.2 220kV DM-type layout for GIS termination arrangement of Transformer.	Please provide a legible layout showing the GIB connection from the Transformer to the respective 220kV bay.	220 kV GIS line bays with 220 kV Bus duct upto 220kV Line Gantry is under construction by current ongoing 220kV Substation Project. Connection from that point to the 220kV side of 400/220kV Transformer by 220kV XLPE Cable is under the scope of this Project.
13	Khimti / Barhabise / Lapsiphedi	Chapter 1 –Project Specific Requirement (Annexure-VII)	Clause No. 3.1.1	The scope of erection work shall include the cost of all labour, tools and plant such as tension stringing equipment and all other incidental expenses in connection with erection and stringing work. The bidders shall indicate in the offer the sets of stringing equipment he would deploy exclusively for this transmission line package. The stringing equipment shall be of sufficient capacity to string simultaneously a bundle of QUAD MOOSE Conductors.	AS per SLD and BPS, incoming Line continuous current is 4000A. For 4000A Quad Bull Conductor is required. However as per the Clause No. 3.1.1 of PSR, line side stringing conductor is mentioned as "Quad Moose". Please confirm the conductor type to be used.	Conductor type is Quad Moose

Clarification no. 1						
S. N.	**Substation**	**Volume / Section**	**Clause Number**	**Description**	**Bidder's Queries**	**NEA Response**
14	Khimti / Barhabise / Lapsiphedi	Chapter 1 –Project Specific Requirement	Clause No. 1.4 (A.i)	A. i. 2 nos. of 400 kV Bays to terminate 400 kV D/C Quad Moose ACSR lines from Barhabise.	We understand that supply and erection of the line side conductor and it's string insulator is not in bidder's scope of work. Please confirm.	Supply and Erection of conductor, String Insulators with necessary hardwares required to connect 400kV Dead end towers and 400kV line bay gantries is envisaged under present scope of work.
15	Khimti	SLD & Layout		Orientation of bays	The bay orientation of the SLD is not matching with the bay orientation shown in the layout. Kindly provide the correct SLD / Layout.	layouts provided in bid document are tentative only. Layout arrangement can be changed considering technical requirements during detail engineering
16	Khimti / Barhabise	Price Schedule: 1558513179_Vol III_KBL		Q. 1. 220kV cable 1.1 220kV grade 1 core, 1200sq.mm XLPE insulated copper cable as per technical specification	We understand that 220kV 1200Sq.mm Cu. cable is considered from 220kV Side of transformer to the existing 220kV line bay which shall be used as transformer bay. Please confirm.	Bidders understanding is generally in order.
17	Khimti / Barhabise	General		2220kV Cable laying	we understand that laying of 220kV Cable shall be buried, no trench is envisaged for 220kV HT Cable.	Trench is evisaged under present scope of work for laying of 220kV Cable.
18	Khimti / Barhabise	Chapter 14 –Switchyard Erection	Clause No. 8.3.2	The ground electrodes shall be 16mm diameter and 3.0 meter long (min.) copper clad steel. These shall be driven into ground and connected to the main ground grid.	Please clarify the thickness of copper cladding for the earth electrode.	shall be finalized during detail engineering.
19	Khimti / Barhabise	Chapter 7 –LT Switchgear	Clause No. 1.2 & 1.25.2	The current ratings of all equipments as specified in the Single Line Diagram for AC & DC System are the minimum standards current ratings at a reference ambient temperature as per relevant International Standards.	Single Line Diagram for AC & DC system is not available in the tender documents. Please provide the same.	shall be provided during detail engineering
20	Khimti	General	-	Incoming feeders for MSB	We understated that there is only one incoming feeder in the MSB from 630kV LT Trafo. No other incoming LT feeder is envisaged from SEB or existing supply. Please confirm.	As presently, only one LT transformer is envisaged as an incomer-1 of the Main Switch Board, the Incomer-2 of Main switch Board under present scope shall be fed from existing 400V ACDB board located in underconstruction 220 kV Substation Control Room Building.
21	Khimti	General	-	Incoming feeders for ACDB	We understand that the ACDB shall have two incomers, one from MSB (present scope) and other one from the existing ACDB (looping). For emergency AC supply, existing DG supply shall be looped from the existing ACDB. Please confirm.	As presently, only one LT transformer is envisaged as an incomer-1 of the Main Switch Board, the Incomer-2 of Main switch Board under present scope shall be fed from existing 400V ACDB board located in underconstruction 220 kV Substation Control Room Building. Existing DG supply shall be used for emergency AC supply,

Clarification no. 1						
S. N.	**Substation**	**Volume / Section**	**Clause Number**	**Description**	**Bidder's Queries**	**NEA Response**
22	Khimti / Barhabise / Lapsiphedi	1558513179_Vol II(Part 1 of 2)_KBL	Chapter 1. Project Specific Requirement	1.5.1 400kV New Khimti GIS Substation 7) The incoming/outgoing 400 kV lines Bays (From Barhabise) is supposed to be charged at 220 kV Voltage level at under construction 220/132 kV New Khimti Substation. Under present scope of the contract, same 400 kV lines shall be terminated in 400 kV bays and the under construction 220 kV GIS lines bays shall be used as 220 kV ICT bays. The 220 kV Bus bar scheme is Double Main bus. The necessary augmentation, connection and reinforcement to use the existing 220 kV Lines bays as ICT bays shall be under the scope of Contractor.	From the Bid Price Schedule, we understand that terminal point of present scope of work is from the 400kV GIB termination for the line conductor to the 220kV cable termination to the 220kV AIS switchyard for respective substation. We understand that no 220kV busbar augmentation work, connection and reinforcement of existing 220kV line bays work is in bidder's scope. Please confirm.	shall be as per the Provision of Bid documents
23	Khimti / Barhabise / Lapsiphedi	1558513179_Vol II(Part 1 of 2)_KBL	Chapter 1. Project Specific Requirement, clasue No. 15	1.5.1 400kV New Khimti GIS Substation 13) Augmentation and Extension of sub-station automation system by providing BCUs along with associated equipments including hardware and software for following bays (bay as defined in Technical Specification, Section - Substation Automation).	Please provide the make and model of the existing substation automation system.	shall be provided during detail engineering
24	Khimti / Barhabise	1558513179_Vol II(Part 1 of 2)_KBL	Chapter 1. Project Specific Requirement, Clause No. 22	1.5.1 400kV New Khimti GIS Substation 22) The earth mat for GIS earthing and the yard earthing required as per specification is in the bidder scope. The earth mat already exists in the 220 kV switchyard area.	Please provide the existing earthmat layout for existing 220kV Khimti, Barhabise and Lapsiphedi substation.	shall be provided during detail engineering
25	Khimti / Barhabise	General	-	-	As the ICT 220KV side, 220KV bay and CB relay panels are not in the present scope of the bidder, therefore associated power & control cables for 220KV bays are excluded from the bidder's scope. Kindly confirm.	All necessary HV (400 kV), MV(220 kV) and LV(if required) Control Relay Panel are included in the present scope of the contract. Please refer Item CONTROL RELAY AND PROTECTION PANELS (WITH AUTOMATION) s. no. 1.3 Transformer Protection Panel (For both HV & MV side) as per Specification in BPS
26	Barhabise	Chapter 3 –GIS Switchgear	Clasue No. 13.1.5	In case of single phase transformers are being installed in the substation, HV &IV auxiliary bus for the transformer bank for connecting spare unit shall be formed inside the GIS hall as per the SLD furnished and as specified in Chapter 1-PSR .	An Auxiliary Bus is required to be constructed inside the GIS but as per BPS, no SF6 To Air Bushing and GIB has been considered for the Spare Transformer Bank. Kindly confirm the actual requirement and provide the amendment for LA , BPI and SF6 to Air Bushing.	Isolator switching of spare transformer is not envisaged under present scope of work.

Clarification no. 1						
S. N.	**Substation**	**Volume / Section**	**Clause Number**	**Description**	**Bidder's Queries**	**NEA Response**
27	Barhabise	Chapter 1 –Project Specific Requirement	Clause No. 1.4 (A.iii)	A. iii. 2 nos. bays for connecting each bank of 160 MVA, 400/220 kV Auto Transformers formed with 4 numbers(400/√3)/(220/√3/33) kV,53.33 MVA, single phase auto transformers with one number unit as spare (under construction 220 kV line bays shall be use for 220 kV side ICT bays) along with supply and installation of autotransformers. Supply & Installation of 4 x 53.33 MVA Autotransformers is under present scope and 3 x 105 MVA shall beconnected in future..	As per the SLD, we understand that the Gas Insulated Busduct and Sf6 to Air Bushing for future transformer is considered in present scope. But as per the SLD, the same has been indicated as future work. Please confirm the actual requirement.	Bidder is to quote as per BPS
28	Barhabise	Chapter 1. Project Specific Requirement	Clause No. 7	1.5.2 400kV Barhabise GIS Substation 7) The incoming/outgoing 400 kV lines Bays (From Barhabise) is supposed to be charged at 220 kV Voltage level at under construction 220/132 kV New Khimti Substation. Under present scope of the contract, same 400 kV lines shall be terminated in 400 kV bays and the under construction 220 kV GIS lines bays shall be used as 220 kV ICT bays. The 220 kV Bus bar scheme is Double Main bus. The necessary augmentation, connection and reinforcement to use the existing 220 kV Lines bays as ICT bays shall be under the scope of Contractor.	From the Bid Price Schedule, we understand that terminal point of present scope of work is from the 400kV GIB termination for the line conductor to the 220kV cable termination to the 220kV AIS switchyard for respective substation. We understand that no 220kV busbar augmentation work, connection and reinforcement of existing 220kV line bays work is in bidder's scope. Please confirm.	shall be as per the Provision of Bid documents
29	Lepsipdehi	1558513179_Drawings		400kV GIS Lepsipedhi substation Dwg. No. LEPSIPEDHI-LAYOUT-02(A)	The connectivity of 220kV Switchyard from the ICT is not clear from the layout. Please provide a revised layout for the same.	220 kV GIS line bays with 220 kV Bus duct upto 220kV Line Gantry is under construction by 220 kV Substation Project. Connection of 220 kV Cables from LV side of 400/220 kV Transformer upto above under construction 220kV Bus duct nearby 220kV line Gantry is under present scope.220 kV GIS termination shall be outdoor.
30	Lepsipdehi	1558513179_Drawings		H. Erection Hardware H.2 220kV DM-type layout for GIS termination arrangement of Transformer.	Please provide a legible layout showing the GIB connection from the Transformer to the respective 220kV bay. 	220 kV GIS line bays with 220 kV Bus duct upto 220kV Line Gantry is under construction by 220 kV Substation Project. Connection of 220 kV Cables from LV side of 400/220 kV Transformer upto above under construction 220kV Bus duct nearby 220kV line Gantry is under present scope.220 kV GIS termination shall be outdoor.

Clarification no. 1						
S. N.	**Substation**	**Volume / Section**	**Clause Number**	**Description**	**Bidder's Queries**	**NEA Response**
31	Lepsipdehi	Chapter 1 –Project Specific Requirement	Clause No. 1.4 (A.iii)	A. iii. 2 nos. bays for connecting each bank of 160 MVA, 400/220 kV Auto Transformers formed with 4 numbers(400/√3)/(220/√3/33) kV,53.33 MVA, single phase auto transformers with one number unit as spare (under construction 220 kV line bays shall be use for 220 kV side ICT bays) along with supply and installation of autotransformers. Supply & Installation of 4 x 53.33 MVA Autotransformers is under present scope and 3 x 105 MVA shall beconnected in future..	As per the SLD, we understand that the Gas Insulated Busduct and Sf6 to Air Bushing for future transformer is considered in the present scope. But as per SLD is indicated future work. Please confirm our understanding.	Bidder is to quote as per BPS
32	Lepsipdehi	General	-	-	We understand that, since ICT LV side i.e 220kV side bay & its CB relay panels have been covered in other package, associated control & power cables for 220kV bays are also not included in bidder scope. Kindly confirm our understanding.	All necessary HV (400 kV), MV(220 kV) and LV(if required) Control Relay Panel are included in the present scope of the contract. Please refer Item CONTROL RELAY AND PROTECTION PANELS (WITH AUTOMATION) s. no. 1.3 Transformer Protection Panel (For both HV & MV side) as per Specification in BPS
33	New Khimti	Single Line Diagram & Price Schedule - New Khimti Substation	sl no I, 1.1, a)	400kV CB relay panel with Auto-recloser- 2 sets	As per the SLD, the quantity of 400kV CB relay panels with Auto-recloser shall be 3 sets at New Khimti SS including associated tie bays. Please check & revise the BPS.	Bidder is to quote as per BPS
34	New Khimti	Single Line Diagram & Price Schedule - New Khimti Substation	sl no I, 1.3	Transformer protection panel (for HV & LV)- 1 set	As per SLD Transformer protection panel (for HV & LV) qty shall be 2 sets at New Khimti SS. Please check & revise the BPS.	Bidder is to quote as per BPS
35	New Khimti	Price Schedule - New Khimti Substation	sl no I, 1.4, b) sl no J, 1.5, b) sl no I, 1.4, b)	Augmentation of existing 220 kV bus bar protection scheme - 1 Lot	We understand that the complete bus bar protection for 220kV GIS which is under construction is covered other package at New Khimti. Hence 220kV bus bar protection augmentation is not applicable in bidder scope, since 220kV bays to be used for our Transformer LV termination are also covered in other package. Kindly confirm.	Augmentation of existing 220 kV bus bar protection scheme for 220 kV ICT bays is under present scope of works
36	New Khimti	1558513179_Vol II(Part 1 of 2)_KBL	Chapter 1. Project Specific Requirement. Cl 1.5.1 A. 13) 1.5.2 A. 14) 1.5.3 A. 13)	In the present scope, bidder shall include BCUs required for 400 kVbays including all necessary hardware and software to integrate with the existing Substation Automation System.	We understand that the BCU for 220kV bays are covered under other package at New Khimti substation. Hence the integration of these 220kV bays with existing SAS is also not envisaged in present scope of the bidder. Kindly confirm.	Under construction 220 kV substations shall be equipped with Operator Workstations (HMI) along with SAS . Integration of SAS for under construction 220 kV substation with SAS for 400kV substation is present scope of work. So, bidder shall require to supply all necessary hardware and software to integrate with the existing Substation Automation System including up-dation of system database, displays, and development of additional displays and reports alll complete as per requirement. Thus, Bidders are requested to understand accordingly and quote their rates and prices accordingly.

Clarification no. 1						
S. N.	**Substation**	**Volume / Section**	**Clause Number**	**Description**	**Bidder's Queries**	**NEA Response**
37	New Khimti	1558513179_Vol II(Part 1 of 2)_KBL	Chapter 1. Project Specific Requireme	General	Please confirm the make & model of the existing 220kV bus bar protection relay at New Khimti.	Existing 220kV bus bar protection relay at New Khimti. is Siemens make
38	New Khimti	1558513179_Vol II(Part 1 of 2)_KBL	Chapter 1. Project Specific Requirement. Cl 1.5.1	The Bidder shall install Giga-Ethernet cards compatible with existing SDH Equipment installed at New Khimti Substation.	Please confirm the make & model of existing SDH equipment at New Khimti substation.	Existing SDH equipment is Siemens make
39	Barhabise	Single Line Diagram & Price Schedule - New Barhabise Substation	sl no J, 1.1, a)	400kV CB relay panel with Auto-recloser- 4 sets	As per SLD 400kV CB relay panels with Auto-recloser qty shall be 6 sets at New Barhabise SS including associated tie bays also. Please check & revise the BPS.	Bidder is to quote as per BPS
40	Barhabise	Single Line Diagram & Price Schedule - New Barhabise Substation	sl no J, 1.1, b)	400kV CB relay panel with out Auto-recloser- 6 sets	As per SLD 400kV CB relay panels with out Auto-recloser qty shall be 5 sets at New Barhabise SS. Please check & revise the BPS.	Bidder is to quote as per BPS
41	Barhabise	Single Line Diagram & Price Schedule - New Barhabise Substation	sl no J, 1.3	Transformer protection panel (for HV & LV)- 1 set	As per SLD Transformer protection panel (for HV & LV) qty shall be 2 sets at New Barhabise SS. Please check & revise the BPS.	Bidder is to quote as per BPS
42	Barhabise	1558513179_Vol II(Part 1 of 2)_KBL	Chapter 1. Project Specific Requirement. Cl 1.5.2	The Bidder shall install Giga-Ethernet cards compatible with existing SDH Equipment installed at Barhabise Substation.	Please confirm the make & model of the existing SDH equipment at Barhabise substation.	Existing SDH equipment is Siemens make
43	Lapsiphedi	Single Line Diagram & Price Schedule - Lapsiphedi	sl no I, 1.1, a)	400kV CB relay panel with Auto-recloser- 4 sets	As per SLD 400kV CB relay panels with Auto-recloser qty shall be 6 sets at Lapsiphedi SS including associated tie bays also. Please check & revise the BPS.	Bidder is to quote as per BPS
44	Lapsiphedi	Single Line Diagram & Price Schedule - Lapsiphedi	sl no I, 1.1, b)	400kV CB relay panel with out Auto-recloser- 4 sets	As per SLD 400kV CB relay panels with out Auto-recloser qty shall be 3 sets at Lapsiphedi SS. Please check & revise the BPS.	Bidder is to quote as per BPS
45	Lapsiphedi	Single Line Diagram & Price Schedule - Lapsiphedi	sl no I, 1.3	Transformer protection panel (for HV & LV)- 1 set	As per SLD Transformer protection panel (for HV & LV) qty shall be 2 sets at Lapsiphedi SS. Please check & revise the BPS.	Bidder is to quote as per BPS
46	Lapsiphedi	1558513179_Vol II(Part 1 of 2)_KBL	Chapter 1. Project Specific Requirement. Cl 1.5.3	The Bidder shall install Giga-Ethernet cards compatible with existing SDH Equipment installed at Lapsiphedi Substation.	Please confirm the make & model of the existing SDH equipment at Lapsiphedi.	shall be provided during detail engineering
47	General	1558513179_Vol II(Part 1 of 2)_KBL	Chapter 1. Project Specific Requirement. Cl 11.0, 11)	One number each Energy meter for the record and revenue purpose is to be provided for each 400/220 bays (transfer & Bus coupler bays to be excluded) under present scope of contract, meeting the requirement as specified at Annexure – III.	We understand that, energy meters for 220kV bays are not envisaged in the bidder's scope as the 220kV bay construction & its C&R panels are also not in the bidder's scope. Please confirm.	HV (400 kV), MV(220 kV) and LV(if required) Control Relay Panel are included in the present scope of the contract. Please refer Item CONTROL RELAY AND PROTECTION PANELS (WITH AUTOMATION) s. no. 1.3 Transformer Protection Panel (For both HV & MV side) as per Specification in BPS. Hence Energy meter for both 400kV and 220 kV is envisaged under present scope of work.

Clarification no. 1						
S. N.	**Substation**	**Volume / Section**	**Clause Number**	**Description**	**Bidder's Queries**	**NEA Response**
48	New Khimti	1558513179_Vol II(Part 1 of 2)_KBL & BPS	Vol-II (1of2), Cl.1.5.1.A. 14 Vol-III, Sch-1, New Khimti S.no.V.b)	In the present scope of contract, the necessary interfacing of the existing communication system for the integration of 400 kV Lines shall be included. The Bidder shall install Giga-Ethernet cards compatible with existing SDH Equipment installed at New Khimti Substation. Sch-1 S.No. V.b)Gigabit Ethernt Interface 10/100/1000 Mbps with Layer-2 Switching Card-2 Nos.	Gigabit Ethernet interface card compatble with existing SDH Equipment are to be provided. Please note that Gigabit Ethernet Interface Cards are properitary in nature & must be procured from existing OEM of existing FOTE Equipment. Make/Model of existing FOTE Equipment not provided. It's not possible to consider this card by bidder. We request NEA to consider supplying of Gigabit Ethernet Card of existing FOTE make in their scope & delete this Line item from price schedule in order to put all bidders on same platform & competitive. Otherwise request NEA to to procure new set of FOTE equipment in line with FOTE specifications (Vol.II, CHapter-19) to have single source of ownership.	Existing FOTE equipment is Siemens make
49	Barhabise	1558513179_Vol II(Part 1 of 2)_KBL & BPS	Vol-II (1of2), Cl.1.5.2.A. 15 Vol-III, Sch-1, Barhabise S.No. W.b)	In the present scope of contract, the necessary interfacing of the existing communication system for the integration of 400 kV Lines shall be included. The Bidder shall install Giga-Ethernet cards compatible with existing SDH Equipment installed at Barhabise Substation. Sch-1 S.No. W.b)Gigabit Ethernt Interface 10/100/1000 Mbps with Layer-2 Switching Card-2 Nos.	Gigabit Ethernet interface card compatble with existing SDH Equipment are to be provided. Please note that Gigabit Ethernet Interface Cards are properitary in nature & must be prcured from existing OEM of existing FOTE Equipment. Make/Model of existing FOTE Equipment not provided. It's not possible to consider this card by bidder. We request NEA to consider supplying of Gigabit Ethernet Card of existing FOTE make in their scope & delete this Line item from price schedule in order to put all bidders on same platform & competitive. Otherwise request NEA to to procure new set of FOTE equipment in line with FOTE specifications (Vol.II, CHapter-19) to have single source of ownership.	Existing FOTE equipment is Siemens make
50	Lapsiphedi	1558513179_Vol II(Part 1 of 2)_KBL & BPS	Vol-II (1of2), Cl.1.5.3.A. 14 Vol-III, Sch-1, Lapsiphedi S.No.V.b)	In the present scope of contract, the necessary interfacing of the existing communication system for the integration of 400 kV Lines shall be included. The Bidder shall install Giga-Ethernet cards compatible with existing SDH Equipment installed at Lapsiphedi Substation. Sch-1 S.No. V.b)Gigabit Ethernt Interface 10/100/1000 Mbps with Layer-2 Switching Card-2 Nos.	Gigabit Ethernet interface card compatble with existing SDH Equipment are to be provided. Please note that Gigabit Ethernet Interface Cards are properitary in nature & must be prcured from existing OEM of existing FOTE Equipment. Make/Model of existing FOTE Equipment not provided. It's not possible to consider this card by bidder. We request NEA to consider supplying of Gigabit Ethernet Card of existing FOTE make in their scope & delete this Line item from price schedule in order to put all bidders on same platform & competitive. Otherwise request NEA to to procure new set of FOTE equipment in line with FOTE specifications (Vol.II, CHapter-19) to have single source of ownership..	shall be provided during detail engineering

Clarification no. 1						
S. N.	**Substation**	**Volume / Section**	**Clause Number**	**Description**	**Bidder's Queries**	**NEA Response**
51	Khimti / Barhabise / Lapsiphedi	BPS	Vol.III Sch-1, New Khimti.S.No.X Vol.III Sch-1, New Khimti.S.No.Y Vol.III Sch-1, New	DPC-2 Nos. DPC-4 Nos. DPC-4 Nos. The DPC can be either housed in offered Control & Protection Panel / PLCC Panel or in separate panel.	Please confirm that new DPC's at New Khimti, Barhabise,Lapsiphedi will be installed in existing FOTE Panel.	The DPC shall be housed in separate panel.
52		1558513179_Vol II(Part 1 of 2)_KBL & BPS	Vo.II Digital protection Coupler specifications	Bidder shall quote for protection signalling equipment suitable for 4 commands with separate trip counters for transmit and receive. With regard to trip counters alternate arrangement .i.e. Laptop along with software & all accessories to download events including carrier receipt and transmit shall be acceptable. Laptop for the above shall be supplied at each substation under substation package.	We understand that in case bidder is offering external trip counters then Laptop at each substation is not required to be offerd. Please confirm.	Technical Specification of the Bidding Documents shall governs.
53	Lapsiphedi	Project Specific Requirement 1558513179_Vol II(Part 1 of 2)_KBL	Clause No. 1.4 Pg. 3/412	Lapsiphedi sub-station: 2 nos. Spare Bays to terminate 400 kV D/C Quad Moose ACSR lines.	Please provide the line length of spare line bays. (to decide on requirement of controlled switching device/PIR).	Line length of spare line bays is 59 km
54	Khimti / Barhabise / Lapsiphedi	Project Specific Requirement 1558513179_Vol II(Part 1 of 2)_KBL	Clause No. 1.5.1, 1.5.2, 1.5.3 A) 1.2, 1.3, pg 3 to 22	Three Sets of three pole, 2000A group operated disconnector with safety grounding switch complete with manual and motor driven operating mechanism.	As the equipment type is GIS, safety grounding switch is not combined with isolator. Request to remove the sentence "with safety grounding switch".	Technical Specification of the Bidding Documents shall governs.
55	Khimti / Barhabise / Lapsiphedi	Project Specific Requirement 1558513179_Vol II(Part 1 of 2)_KBL	Clause No. 1.5.1, 1.5.2, 1.5.3 A) 1.2, 1.3, 1.4, 1.5 Pg 3-22/412	One Bay Module Control Cabinet including Bay Controller.	As bay controller unit is provided in Local Control Cubicle of GIS, Gas SLD including position indications of all primary components of GIS can be viewed in BCU. Separate mimic/LED display with control, measuring instruments are not to be considered in LCC. Please confirm.	Local Control Cubicle for 400 kV GIS Busbar system for each Bay shall be provided as per clause 14, Chapter 3- GIS Switchgear of Technical Specifications. Control panel with BCU can be combined in the CB relay panels being supplied under present scope.
56	Khimti / Barhabise / Lapsiphedi	Project Specific Requirement 1558513179_Vol II(Part 1 of 2)_KBL	Clause No. 2, pg 7,16 & 25 / 412	Pre-insertion resistor (PIR) is required for all Main & Tie circuit breakers for line bays and Control switching device (CSD) is required for Main & Tie circuit breakers of Auto Transformers, Bus reactor bays as per specification. However, pre-insert resistor (PIR) which are required for all Main & Tie circuit breakers for line bays may be replaced with alternate suitable device (like control switching device (CSD), capacitance Current Switching device)	Please note that as per BPS, Drawings & scope described, PIR or CSD for line and its tie bays are not required. However as per Clause no. 2 PIR & CSD are required. Please clarify the actual requirement.	Shall be as per chapter-1- Project Specific Requirement, clause 1.5.1, 2, page 5 , 1.5.2, 2, page 14 and 1.5.3, 2, page 23 of the bidding documents.

Clarification no. 1						
S. N.	**Substation**	**Volume / Section**	**Clause Number**	**Description**	**Bidder's Queries**	**NEA Response**
57	Khimti / Barhabise / Lapsiphedi	Project Specific Requirement 1558513179_Vol II(Part 1 of 2)_KPL	Clause No. 4.1 Pg 32/412	Maximum ambient air temperature (deg C) - 45	Design ambient temperature is indicated as 50 deg C. Please clarify your requirement. Also being indoor GIS, design ambient temperature can be 45 deg C.	Shall be as per Vol II, Chapter-1, Project Specific Requirement, Clause no. 4.1
58	Khimti / Barhabise / Lapsiphedi	Annexure-1 – List of mandatory spare parts	Clause No. 1.90 pg 42/412	Pipe length (Copper or Steel as applicable) for SF6 Circuit of each type - 1Set	Our design has no piping arrangement. Hence not applicable.	shall be finalized during detail engineering.
59	Khimti / Barhabise / Lapsiphedi	Annexure-1 – List of mandatory spare parts	Clause No. 1.11.1 pg 42/412	For 3 phase enclosure (if applicable)	As offered 400kV GIS is single phase encapsulated, this item is not applicable.	Bidders understanding is generally in order.
60	Khimti / Barhabise / Lapsiphedi	Annexure-1 – List of mandatory spare parts	Clause No. 1.12 pg 42/412	Locking device to keep the Disconnectors (isolators) and earthing switches in close or open position in case of removal of the driving mechanism	When the operating mechanism of the disconnector or earthing switch is removed, the contacts cannot be disturbed from outside in our design. Hence locking device is not required.	shall be finalized during detail engineering.
61	Khimti / Barhabise / Lapsiphedi	Annexure-1 – List of mandatory spare parts	Clause No. 2.1 pg 43/412	Complete circuit breaker pole of each type & rating complete with interrupter, main circuit enclosure and Marshalling box with operating mechanism – 3 EA	Marshalling Box is not applicable as its functional requirement has been taken care inside the operating mechanism box.	Provision of bidding documents remains unchanged
62	Khimti / Barhabise / Lapsiphedi	Annexure-1 – List of mandatory spare parts	Clause No. 2.10, 2.11 pg 43/412	Closing assembly / valve, 3 Nos. of each type 1 No. – 2 set Trip assembly / valve, 3 Nos. of each type 1 No.- 2 set	Not applicable.	shall be finalized during detail engineering.
63	Khimti / Barhabise / Lapsiphedi	Annexure-1 – List of mandatory spare parts	Clause No. 3.6 pg 45/412	Open / Close contactor assembly, timers, key interlock for one complete (3 phase) dis-connector and (3 phase) earthing switch of each type and rating - 1Set	Please note that proposed interlocks are all electrical with pad locking arrangement. Key interlocking is not applicable. Open/close contactor assembly, timers for one complete disconnector and earthing switch shall be offered as spare.	shall be finalized during detail engineering.
64	Khimti / Barhabise / Lapsiphedi	Annexure-1 – List of mandatory spare parts	Clause No. 4.2 pg 46/412	Current Transformer: Secondary bushing of each type	Not applicable to GIS CTs as secondary cores are outside gas chamber.	shall be finalized during detail engineering.
65	Khimti / Barhabise / Lapsiphedi	Chapter-2 – General technical requirement	Clause No. 4.6.3, 133 to 134/412	Design ambient temperature -50 deg C	Please clarify. Being indoor GIS, design ambient can be 45 deg C.	shall be finalized during detail engineering.
66	Khimti / Barhabise / Lapsiphedi	Chapter-2 – General technical requirement	Clause No. 6.2.1.2 pg 142/412	Space heaters: One or more adequately rated thermostatically connected heaters shall be supplied to prevent condensation in any compartment.	Space heaters shall be provided in LCC and operating mechanisms. Not applicable to GIS compartments.	shall be finalized during detail engineering.
67	Khimti / Barhabise / Lapsiphedi	Chapter-3 – Gas insulated switchgears	Clause No. 5.6.4 pg 196/412	The gap between the open contacts shall be such that it can withstand at least the rated phase to ground voltage for eight hours at zero pressure above atmospheric level of SF6 gas due to its leakage. The breaker should be able to withstand all dielectric stresses imposed on it in open condition at lockout pressure continuously (i.e. 2 p.u power frequency voltage across the breaker continuously)	As this test is not defined in IEC, technical note for the same shall be submitted.Request to note that as per clause 4.1.1 pg 2, breaker can withstand 2 p.u power frequency voltage across open contacts at lock out pressure for a duration of 15 min.	As per Vol II, Chapter 3, Gas Insulated Switchgears, Clause no. 5.6.4

Clarification no. 1						
S. N.	**Substation**	**Volume / Section**	**Clause Number**	**Description**	**Bidder's Queries**	**NEA Response**
68	Khimti / Barhabise / Lapsiphedi	Price schedule	B) c	220kV SF6 to Cable bushing alongwith associated support strcture for connection GIS to AIS alongwith support structure – 6nos	Please clarify – We understand 220kV SF6 to cable bushing means 220kV GIS cable enclosure as per IEC.	shall be as per IEC
69	New Khimti / Barhabise / Lapsiphedi	General		FGL of the proposed 400 KV GIS Substation	Kindly provide the Contour drawing with FGL of the proposed 400 KV GIS Substation.	Detail survey is in the present scope of contract.
70	New Khimti / Barhabise / Lapsiphedi	General		Soil Investigation Report	Kindly provide the soil investigation report of the proposed substation.	Soil investigation is in the present scope of contract.
71	New Khimti / Barhabise / Lapsiphedi	General		Land Acquisition of proposed 400 KV GIS substation	We understand that Land acquisition for the proposed 400 KV GIS substation is done by NEA. Please confirm.	Bidders understanding is generally in order.
72	New Khimti / Barhabise / Lapsiphedi	Shedule no.4(a)		Regarding construction of other building except GIS substation	We understand that buildings such as quarters, security building, approach road etc. are not in the scope of the bidder. Please confirm our understanding	Bidders understanding is generally in order.
73	New Khimti / Barhabise / Lapsiphedi	General		Roads leading upto to the approach road of Khemti, Barhabhise and Lapsiphedi substations.	Based on the site visit done, it is noted that the roads leading upto the approach road of each substation require strengthening at various places for Khimti & Barbhabise substations. Also please note that road leading upto the approach road of Lapsiphedi substation is in extremely bad condition requiring major repair. We understand that the construction / repair / strengthening of main road leading upto the approach road for all the 3 substations is not in the scope of the bidder. Please confirm.	Approach road till the sub-station boundary from main highway is not envisaged under Bidder's scope of works

Nepal Electricity Authority
Project Management Directorate
Khimti-Barhabise-Lapsiphedi 400 kV Substation Project

OCB No.: PMD/PTDSSP/KBL-75/76-01" Design, Supply, Installation and Commissioning of 400 kV Gas Insulated Substations (GIS) at New Khimti, Barhabise and Lapsiphedi"

Set-4

Clarification no. 1					
Sl. No.	**Volume / Section**	**Document / Clause Reference**	**Tender Requirement**	**Bidder's Queries**	**NEA Response**
1	Vol-I	General	Taxes & Duties	Please confirm that the contractor shall not bear any demurrage or penalties imposed by the port authorities due to delayed clearence of consignment not attributable to the Contractor and that such expenses, if any, shall be to the Employer's account.	shall be as per the Provision of Bid Documents
2	Vol-I	Section 7 - General Conditions of Contract, Clause 7.3 & Section 8 - Special Conditions of Contract 7.3 of SCC	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	(i) GE 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.	Provision of Bidding Documents remains unchanged
3	Vol-I	GCC Clause 10.2	Employer Responsibilities - Handing over of Site and Right to way to the Site	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.	Provision of Bidding Documents remains unchanged
4	Vol-I	GCC Clause 14.0	Taxes & Duties	Please clarify the percentage of TDS & WHT applicable for this package.	Please follow Vol I Section 8 - SCC Claue-14, Taxes & Duties. Information on Tax obligation in Nepal can be found at the website of Inland Revenue Department of Nepal Government http://www.ird.gov.np. Kindly visit office and website for further information.
5	BPS	Schedule 4	Schedule No. 4 (a): Installation and Construction Charges (c): Training Charges for training to be imparted to Employer's Personnel by Bidder's Instructor in Nepal (Common for all three substations)	We understand that price to be quoted in Schedule 4(a) & schedule(c) are to be quoted excluding taxes & duties. Please confirm.	Bidders understanding is generally in order.
6	Vol-I	Section 7 - General Conditions of Contract, Clause 20.3.1	The Contractor shall prepare or cause its Subcontractors to prepare, and furnish to the Project Manager the documents listed in the Appendix (List of Documents for Approval or Review) to the Contract Agreement for its approval or review as specified and in accordance with the requirements of GCC Subclause 18.2 (Program of Performance)	The Contractor shall not share any proprietary information, drawings, designs etc., produced or developed by the contractor for this Project. Requesting NEA to amend the clause accordingly.	Provision of Bidding Documents remains unchanged

Clarification no. 1					
Sl. No.	**Volume / Section**	**Document / Clause Reference**	**Tender Requirement**	**Bidder's Queries**	**NEA Response**
7	Vol-I	Section 7 - General Conditions of Contract, Clause 15.1	License/ Use of Technical Information- For the operation and maintenance of the Plant, the Contractor hereby grants a non-exclusive and nontransferable license (without the right to sublicense) to the Employer under the patents, utility models, or other industrial property rights owned by the Contractor or by a third party from whom the Contractor has received the right to grant licenses thereunder, and shall also grant to the Employer a nonexclusive and nontransferable right (without the right to sublicense) to use the know-how and other technical information disclosed to the Employer under the Contract. Nothing contained herein shall be construed as transferring ownership of any patent, utility model, trademark, design, copyright, know-how, or other	We propose following: For the operation and maintenance of the Plant, the Contractor hereby grants a non-exclusive and non-transferable license (without the right to sublicense) to the Employer under the patents, utility models, or other industrial property rights owned by the Contractor or by a third party from whom the Contractor has received the right to grant licenses thereunder, and shall also grant to the Employer a nonexclusive and non-transferable right (without the right to sublicense) to use the know-how and other technical information disclosed to the Employer under the Contract for the operation and maintenance of the Plant.	Provision of Bidding Documents remains unchanged
8	Vol-I	Section 7 - General Conditions of Contract, Clause 15.2	The copyright in all drawings, documents, and other materials containing data and information furnished to the Employer by the Contractor herein shall remain vested in the Contractor or, if they are furnished to the Employer directly or through the Contractor by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.	We propose following: The copyright in all drawings, documents, and other materials containing data and information furnished to the Employer by the Contractor herein shall remain vested in the Contractor or, if they are furnished to the Employer directly or through the Contractor by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party. However, the Employer shall be obligated to use such drawings, documents and other material for the intended purpose only and shall indemnify and keep Contractor indemnified against any losses, claims, damages, penalty and compensation arising out of or in connection thereto.	Provision of Bidding Documents remains unchanged
9	Vol-I	Section 7 - General Conditions of Contract, Clause 16	Confidential Information	We understand that in absence of any specified protection period, the obligation of confidentiality shall survive for 2 years. Please confirm.	Provision of Bidding Documents remains unchanged
10	Vol-I	Section 7 - General Conditions of Contract, Clause 21.2.2	Upon receipt of such item, the Contractor shall inspect the same visually and notify the Project Manager of any detected shortage, defect, or default. The Employer shall immediately remedy any shortage, defect, or default, or the Contractor shall, if practicable and possible, at the request of the Employer, remedy such shortage, defect, or default at the Employer's cost and expense…….	We understand that there shall be no employer supplied material under this contract and hence this clause shall not be applicable. However if Employer supplied material, we understand that Time for Completion shall be extended accordingly in the event of delay on account of the Employer as per clause 40.1 (e).	Provision of Bidding Documents remains unchanged
11	Vol-I	Section 7 - General Conditions of Contract, Clause 22.1.1 (b)	……..If such error is based on incorrect data provided in writing by or on behalf of the Employer, the expense of rectifying the same shall be borne by the Employer	We understand that Contractor would be entitled to extension of time in addition to costs for such delays/ errors.	shall be as per the Provision of Bid Documents
12	Vol-I	Section 7 - General Conditions of Contract, Clause 22.6	Emergency Work:- If the work done or caused to be done by the Employer is work that the Contractor was liable to do at its own expense under the Contract, the reasonable costs incurred by the Employer in connection therewith shall be paid by the Contractor to the Employer.	We Propose following: If the work done or caused to be done by the Employer is work that the Contractor was liable to do at its own expense under the Contract, the reasonable actual costs incurred by the Employer in connection therewith shall be paid by the Contractor to the Employer.	Provision of Bidding Documents remains unchanged

Clarification no. 1					
Sl. No.	**Volume / Section**	**Document / Clause Reference**	**Tender Requirement**	**Bidder's Queries**	**NEA Response**
13	Vol-I	Section 7 - General Conditions of Contract, Clause 24.3	Completion of the Facilities:- 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 Subclause 24.2, the Contractor shall commence Pre-commissioning of the Facilities or the relevant part thereof in preparation for Commissioning, subject to GCC Subclause 25.5.	We understand that Contractor would be entitled to extension of time in for any delay due to the Employer.	shall be as per the Provision of Bid Documents
14	Vol-I	Section 7 - General Conditions of Contract, Clause 27.8	Defect Liability:- 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.	Provision of Bidding Documents remains unchanged
15	Vol-I	Section 7 - General Conditions of Contract, Clause 27.8	Except as provided in GCC Clauses 27 and 33, the Contractor shall be under no liability whatsoever and howsoever arising, and whether under the Contract or at law, in respect of defects in the Facilities or any part thereof, the Plant, design, or engineering, or work executed that appear after Completion of the Facilities or any part thereof, except where such defects are the result of the gross negligence, fraud, criminal, or willful action of the Contractor.	We propose following: Except as provided in GCC Clauses 27 and 33, the Contractor shall be under no liability whatsoever and howsoever arising, and whether under the Contract or at law, in respect of defects in the Facilities or any part thereof, the Plant, design, or engineering, or work executed that appear after Completion of the Facilities or any part thereof, except where such defects are the result of the gross negligence, fraud, criminal, or willful misconduct action of the Contractor. Willful action needs to be changed to willful misconduct. Definition should be as provided below: 1.1 “Willful Misconduct" means, on the part of a Party’s Managerial or Senior Supervisory Personnel, an intentional and wrongful act, or an intentional and wrongful omission of some act, in either case with the intent to inflict damage or injury. 1.2 “Managerial or Senior Supervisory Personnel” means any person employed by a party that is not an hourly worker, clerk, craft labourer, mechanic, foreman, subcontractor, engineer, inspector, Technical Advisor (“TA”), TA Site Manager, Customer Performance Manager, first level of managerial or supervisory personnel, or Senior Supervisory Personnel, an intentional and wrongful act, or an intentional	Provision of Bidding Documents remains unchanged

Clarification no. 1					
Sl. No.	**Volume / Section**	**Document / Clause Reference**	**Tender Requirement**	**Bidder's Queries**	**NEA Response**
16	Vol-I	Section 7 - General Conditions of Contract, Clause 29.1	Such indemnity shall not cover any use of the Facilities or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, any infringement resulting from the use of the Facilities or any part thereof, or any products produced thereby in association or combination with any other equipment, plant or materials not supplied by the Contractor, pursuant to the Contract Agreement.	Please add the below to clause 29.1: Notwithstanding anything contained in the Contract, the Contractor shall have no obligation or liability with respect to any Claim based upon (a) Products or Services that have been modified, or revised, (b) failure of Employer to implement any update provided by Contractor that would have prevented the Claim, or (c) Products or Services made or performed to Employer 's specifications. For avoidance of any doubt each party shall retain ownership of all confidential information and intellectual property it had prior to the contract. All rights in and to products not expressly granted to Employer are reserved by contractor. All new intellectual property conceived or created by contractor in the performance of this contract, whether alone or with any contribution from Employer, shall be owned exclusively by contractor. Employer agrees to deliver assignment documentation as necessary to achieve that result.	Provision of Bidding Documents remains unchanged
17	Vol-I	Section 7 - General Conditions of Contract, Clause 30.2	The aggregate liability of the Contractor to the Employer, whether under the Contract, in tort or otherwise, shall not exceed the amount resulting from the application of the multiplier specified in the SCC, to the Contract Price or, if a multiplier is not so specified, the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Contractor to indemnify the Employer with respect to patent infringement.	We propose following: The aggregate liability of the Contractor to the Employer, whether under the Contract, in tort or otherwise, shall not exceed the amount resulting from the application of the multiplier specified in the SCC, to the Contract Price or, if a multiplier is not so specified, the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Contractor to indemnify the Employer with respect to patent infringement. here should not be exceptions to the limit of liability for the cost of repairing and replacing defective equipment. This should be a part of the limitation of liability. Please modify. The terms Gross Negligence and Willful Misconduct shall have following meaning: 1.3 "Gross Negligence" means tortious acts or omissions by Seller's Managerial or Supervisory Personnel, well in excess of negligence and amounting to an intentional disregard of a grave, known risk, where such disregard constitutes an extreme deviation from even minimal care. 1.4 "Willful Misconduct" means, on the part of a Party's Managerial or Senior Supervisory Personnel, an intentional and wrongful act, or an intentional and	Provision of Bidding Documents remains unchanged

Clarification no. 1					
Sl. No.	**Volume / Section**	**Document / Clause Reference**	**Tender Requirement**	**Bidder's Queries**	**NEA Response**
18	Vol-I	Section 7 - General Conditions of Contract, Clause 33.1	The Contractor shall indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, in respect of the death or injury of any or loss of or damage to any property, arising in connection with the supply and installation of the Facilities and by reason of the negligence of the Contractor or its Subcontractors, or their employees, officers or agents, except any injury, death or property damage caused by the negligence of the Employer, its contractors, employees, officers or agents.	We Propose following: The Contractor shall indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, in respect of the death or injury of any Third party or loss of or damage to any third party property, arising in connection with the supply and installation of the Facilities and by reason of the negligence of the Contractor or its Subcontractors, or their employees, officers or agents, except any injury, death or property damage caused by the negligence of the Employer, its contractors, employees, officers or agents. Please add the following as Clause 33.1: Employer (as an "indemnifying party") shall indemnify the contractor (as an "indemnified party") from and against claims brought by a third party, on account of personal injury or damage to the third party's tangible property, to the extent caused by the negligence of the indemnifying party in connection with this contract. In the event the injury or damage is caused by joint or concurrent negligence of the Employer and contractor, the loss or expense shall be borne by each party in	Provision of Bidding Documents remains unchanged
19	Vol-I	Section 7 - General Conditions of Contract, Clause 41	Suspension and Termination	There is no recourse available to the Contractor for Suspension/ termination in case of non-payment or delayed payment. This is onerous. We request that the Contractor shall be entitled to suspend/ terminate the agreement for non-payment or delayed payment of amounts due to it under the Contract.	Provision of Bidding Documents remains unchanged
20	Vol-I	Section 7 - General Conditions of Contract, Clause 42.6	Termination	Kindly add the below as Clause 42.8: If Employer terminates the Contract pursuant to Section 42.4 (a), (b), (c), (e), (f), (g), (h) and/ or 42.6, then (i) Contractor shall reimburse Employer the difference between that portion of the Contract Price allocable to the terminated scope and the actual amounts reasonably incurred by Employer to complete that scope, and (ii) Employer shall pay to Contractor (a) the portion of the Contract Price allocable to Products completed, and (b) amounts for Services performed before the effective date of termination. The amount due for Services shall be determined in accordance with the milestone schedule (for completed milestones) and rates set forth in the Contract (for work toward milestones not yet achieved and where there is no milestone schedule), as applicable or, where there are no milestones and/or rates in the Contract, at Contractor's then-current standard time and material rates.	Provision of Bidding Documents remains unchanged
21	Vol-I	Section 7 - General Conditions of Contract, Clause 43.1	Neither the Employer nor the Contractor shall, without the express prior written consent of the other party (which consent shall not be unreasonably withheld), assign to any third party the Contract or any part thereof, or any right, benefit, obligation or interest therein or thereunder.	Please add the following at the end of the Clause: Nothing herein shall affect the right of the Contractor to assign receivable under the Contract by way of factoring.	Provision of Bidding Documents remains unchanged

Clarification no. 1					
Sl. No.	**Volume / Section**	**Document / Clause Reference**	**Tender Requirement**	**Bidder's Queries**	**NEA Response**
22	Vol-I	Section 7 - General Conditions of Contract, Clause 34.1	To the extent specified in the Appendix (Insurance Requirements) to the Contract Agreement, 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 in the said Appendix. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, who should not unreasonably withhold such approval.	To the extent specified in the Appendix (Insurance Requirements) to the Contract Agreement, 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 in the said Appendix. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, who should not unreasonably withhold such approval.	Provision of Bidding Documents remains unchanged
23	Vol-I	Section 7 - General Conditions of Contract, Clause 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 instatllation 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.	Provision of Bidding Documents remains unchanged
24	Vol-I	Section 7 - General Conditions of Contract, Clause 34.1 (c)	Third Party Liability Insurance Covering bodily injury or death suffered by third parties including the Employer's personnel, and loss of or damage to property occurring in connection with the supply and installation of the Facilities.	As Employee's personnel shall be covered in Employee's own insurance program, we request to amend the clause as below: Third Party Liability Insurance Covering bodily injury or death suffered by third parties including the Employer's personnel, and loss of or damage to property occurring in connection with the supply and installation of the Facilities.	Provision of Bidding Documents remains unchanged
25	Vol-I	Section 7 - General Conditions of Contract, Clause 34.1 (f)	Employer's Liability In accordance with the statutory requirements applicable in any country where the Contract or any part thereof is executed.	Kindly specify the statutory requirements if any.	Provision of Bidding Documents remains unchanged
26	Vol-I	Section 7 - General Conditions of Contract, Clause 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.	Provision of Bidding Documents remains unchanged
27	SCC Clause 25.2.2	Commissioning & Operational Acceptance		Understand in the context of substations, Guarantee Tests means tests to verify guaranteed transformer losses. In that case should guarantee test can not be conducted due to non-availability of full load or any other reasons not attributed to the Contractor, the Employer shall issue operational acceptance certificate, if due otherwise.	Provision of Bidding Documents remains unchanged
28	Vol-I	Volume 1, Appendix 2	Price adjustment	Considering the scope involved & completion schedule, we request NEA to consider price on variable basis and provide price adjustment formula.	Provision of Bidding Documents remains unchanged
29	Vol-I	Volume 1, Appendix 6	Scope of Works and Supply by the Employer	Kindly provide the applicable charges or NEA rules for the facilities and supplies being arranged by NEA.	Prevailing charges & rates of NEA is applicable for the facilities and supplies being arranged by NEA in line with terms and conditions of Bidding Document.

Clarification no. 1					
Sl. No.	**Volume / Section**	**Document / Clause Reference**	**Tender Requirement**	**Bidder's Queries**	**NEA Response**
30	Vol-I	Appendix 3 - Insurance Requirements (A) Insurances To Be Taken Out By The Contractor	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.	Provision of Bidding Documents remains unchanged
31	Vol-I	Appendix 3 - Insurance Requirements (a)Cargo Insurance	(*) 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 delete the foot note: ~~(*) 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.~~	Provision of Bidding Documents remains unchanged
32	Vol-I	Appendix 3 - Insurance Requirements (b)Installation All Risks Insurance	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 instatllation 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.	Provision of Bidding Documents remains unchanged
33	Vol-I	Appendix 3 - Insurance Requirements (b)Installation All Risks Insurance	(*) 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 perioerils and collapse.~~	Provision of Bidding Documents remains unchanged
34	Vol-I	Section 8 - Special Conditions of Contract, Clause 15	License/ Use of Technical Information	Kindly add the following second paragraph: Under Sub-clause 15.2. The Employer shall however shall have the right to reproduce any or all drawings, documents and other materials furnished to the Employer for the intended purpose only in relation to this of the Contract and in addition, if required, for operation and maintenance and other contracts of Employer.	Provision of Bidding Documents remains unchanged
35	New Clause	Nuclear Use		The Owner shall confirm that the products/goods and services provided under this contract shall not be used in connection with any nuclear plant or nuclear use. Any such use shall be in fundamental breach of this agreement. Please confirm.	Provision of Bidding Documents remains unchanged
36	New Clause	GENERAL INDEMNITY		Please note that Purchaser (as an "Indemnifying Party") shall indemnify the Contractor (as an "Indemnified Party") from and against claims brought by a third party, on account of personal injury or damage to the third party's tangible property, to the extent caused by the negligence of the Indemnifying Party in connection with this Contract. In the event the injury or damage is caused by joint or concurrent negligence of Purchaser and Contractor, the loss or expense shall be borne by each party in proportion to its degree of negligence. For purposes of Contractor's indemnity obligation, no part of the Products or Site is considered third party property. Please confirm.	Provision of Bidding Documents remains unchanged
37	Vol-I	General	Payment Procedure	We understand that the payments under the contract can be made directly to individual partners of the Joint venture / Consortium based on the authorization of the lead partner. Please confirm.	shall be as per the Provision of Bid Documents

Clarification no. 1					
Sl. No.	**Volume / Section**	**Document / Clause Reference**	**Tender Requirement**	**Bidder's Queries**	**NEA Response**
38	Vol-I	General	Local Registration	We understand that the partner responsible for local work(ETC, Civil etc) in NEPAL is only required for the local registration as per statutory requirements. Please confirm.	shall be as per the Provision of Bid Documents
39	Vol-I	General	Formats	Pleae note that the format of Joint Venture / Consortium or Letter of Intent to form a Joint Venture / Consortium is not available in the bidding documents. We request you to provide the same.	shall be as per the Provision of Bid Documents

Nepal Electricity Authority
Project Management Directorate
Khimti-Barhabise-Lapsiphedi 400 kV Substation Project

OCB No.: PMD/PTDSSP/KBL-75/76-01" Design, Supply, Installation and Commissioning of 400 kV Gas Insulated Substations (GIS) at New Khimti, Barhabise and Lapsiphedi"

Set-5

Clarification no. 1

S. N.	Substation	Vol	Sec / Chapter	Clause	Bidder's Queries	NEA's Response
1	Common	Vol II (Part 1 of 2)	Chapter 1 –Project Specific Requirement	Cl. No. 1.5	In referred clause no., it is mentioned that "GIS is likely to be extended in future". Please clarify how many future bays need to be considered for future extension in 400kV GIS room.	shall be finalized during detail engineering.
2	Common	Vol II (Part 1 of 2)	Chapter 1 –Project Specific Requirement & Drawings	Cl. No. 1.5	In the section of detailed scope of work, Sl. No. A1.1.b, it is mentioned that "Three Nos. 1-phase, inductive potential transformers, complete with isolator switch". But in the SLD drawings, BUS PT with Isolator & Earth switch is provided. Kindly confirm that the earth switch is required.	Shall be as per Vol II, Chapter-1 PSR S.N. A1.1(b)
3	Common	Vol II Part (1 of 2)	Chapter 1 –Project Specific Requirement & Drawings	Cl. No. 1.5	In the section of detailed scope of work, Sl. No. A1.2.b, "Three Nos. 1-phase, 4000A, 6-core, multi ratio, current transformers duly distributed on both side of circuit breaker for Line & Trafo. Bay as per single line diagram" is mentioned. But 6 core of CT are shown in only one side of the breaker in the Single Line Diagram. If the distributed CT core are required, two nos. CT of three cores each is to be considered. Kindly confirm the requirement.	Shall be as per Vol II, Chapter-1 PSR S.N. A1.2(b)
4	Common	Vol II (Part 1 of 2)	Chapter 4 – Switchgear Surge Arrester	Cl. No. 2.0 And Cl. No. 7.0	In clause no. 2.0 (Duty Requirements), Sl. No. d, "420kV class arrester shall be capable of discharging energy equivalent to class 4" is mentioned. In clause no. 7.0 (Technical Parameters), Sl. No. A7.0(g), Long duration discharge class is mentioned as 3. Please confirm the actual requirement.	420kV class arrester shall be capable of discharging energy equivalent to class 4 mentioned.
5	Common	Vol II (Part 1 of 2)	Chapter 3 – GIS Switchgear : Technical parameters for		Rated current of 2000/3150/5000 Amp is given in the data sheet. However, the BOQ mentions the rating of 4000A. Since all bay and line equipment are rated 4000A, please confirm that the 4000 Amp SF6 to Air bushing shall also be acceptable.	Bidder is to quote as per BPS
6	Common	Vol II (Part 1 of 2)	Chapter 1 –Project Specific Requirement And Bid Price Schedule (BPS)	Annexure – V And BPS item no. G	In technical parameters (Annexure – V) for 72.5kV Equipments, Rated short time current of 25kA for 3Sec is mentioned.But in BPS, it is mentioned that rated short time current of 72.5kV equipments is 31.5kA.Please clarify which data is to be considered.	Bidder is to quote as per BPS
7	New Khimti Substation	Vol II (Part 1 of 2)	Chapter 1 –Project Specific Requirement	Cl. No. 1.4 (Scope)	In the referred clause, it is mentioned as "under construction 220kV line bays shall be used for 220kV side ICT bays" Please inform which of the two 220kV line bays (Dhalkebar and Gongar) will be converted to 400/220kV ICT bay.	220 kV Barhabise line bays (related to underconstruction New Khimti-Barhabise 400 kV double ckt Transmission Line) is mentioned as under construction 220kV line bays not Dhalkebar and Gongar
8	Common	Vol II (Part 1 of 2)	Chapter 1 –Project Specific Requirement	Cl. No. 1.5 (The detailed scope of work)	In the referred clause, point no. 5 mentions "220kV (220kV single or twin, 1C 1200 mm2) XLPE Cables along with accessories and Cable sealing for interconnection of 220kV side of 400/220kV Transformer with existing 220kV GIS lines bays to be used as 220kV ICT bays." Whereas point no. 8 mentions "245kV, 2000A, 40 kA for 1Sec, Three 1-Phase (isolated) SF6 Gas insulated Bus Duct (GIB) with support structure (along with Gas monitoring devices, barriers, pressure switches, UHF based Partial Discharge measurement Sensors etc. as required) for connecting 220kV side of 400/220kV Transformer to the existing 220kV Lines bays as ICT bays feeder" These two points are contradicting each-other. Please clarify the exact requirement.	Please refer Vol II, Chapter-1 PSR S.N. 26 page-38

Clarification no. 1						
S. N.	**Substation**	**Vol**	**Sec / Chapter**	**Clause**	**Bidder's Queries**	**NEA's Response**
					Based on our site visit, it appears that 220kV bus duct will not be required at the 220kV side of the ICT for connecting with 220kV existing line bay. Please suggest.	
9	Common	Bid Price Schedule And Drawing			From the BPS, we understand that supply & erection work of 3 nos. single phase transformers will be done in future. Associated equipment for 400kV & 220kV (Bus Duct, LA, BPI) of the future transformers shall be supplied and erected under present scope of work.But in SLDs, future scope of works is mentioned as indicated below: Kindly clarify and confirm the present scope of work for future auto-transformer bay.	Please refer Amendment no. -1 regarding revised quantity of Transformer
10	Common	Vol II (Part 1 of 2) (Part 1 of 2)	Chapter 1 –Project Specific Requirement	Cl. No. 1.5	In Point no. 26 of referred clause number, LT switchgear (AC/DC Distribution boards), it is mentioned that "Integration of new AC/DC Distribution boards with existing AC/DC Distribution boards (if necessary) is also in present scope of work." Please clarify which existing AC/DC DBs are mentioned here and also mention the scope of work (if required) for integration work. Do you mean that there shall be tie feeders among AC/DC boards of 400kV system and 220kV system ?	As presently, only one LT transformer is envisaged as an incomer-1 of the Main Switch Board, the Incomer-2 of Main switch Board under present scope shall be fed from existing 400V ACDB board located in underconstruction 220 kV Substation Control Room Building.
11	Common	Vol II (Part 1 of 2)	Chapter – 5 And BPS	Annexure – K And Cl. no.- 1.5 And BPS Item no – O	As per Cl. No 1.5 of Technical specification and item no – O of BPS, we understand that HVW System should be provided for Transformer fire protection. Whereas in chapter-5 (annexure – K) of Technical specification mention that NIFPS system is required for Transformer fire protection. Hence, please clarify the exact requirement.	Bidder is to quote as per BPS
12	Common	Vol II (Part 2 of 2) And BPS	Chapter 9: Lighting System And BPS	Cl. No. – 1.1.3 And BPS Item no. L.d	In referred Cl. No. 1.1.3, it is mentioned that "The lighting panels of this system will be connected to the Emergency lighting board which is fed from diesel generator during the emergency." But no quantity of diesel generator is given in BPS. Please clarify and confirm that the DG set and Main LT emergency board are included in the 220kV package and one outgoing feeder will be provided from the Main LT emergency DB to the Emergency bus of ACDB of the 400kV substation. The Emergency bus of ACDB shall in turn feed the emergency lighting board.	Confirmed
13	Common	Vol II (Part 1 of 2)	Chapter 1 –Project Specific Requirement	Cl. No. 1.5 Point no.15 (SAS and SCADA Integration)	In referred Cl. No. 1.5, point no. 15, it is mentioned that "The 400/220kV bays under present scope shall be integrated by the contractor into existing SCADA system." Please provide 220kV SAS architecture drawing to understand how the integration between 400kV and 220kV SAS will be done.	shall be provided during detail engineering
14	Common	Vol II (Part 1 of 2)	Chapter 1 –Project Specific Requirement	Cl. No. 1.5 Point no.16	As per Cl. no. 1.5, point no 16, "Complete relay and protection system for 400kV bays (Line bays and ICT Bays) and 220kV ICT bays under present scope as per section – Control and Relay panels. Wiring and other necessary arrangements for integration of existing Bus Bar Protection scheme with 220kV ICT bays is also under present scope" is mentioned. Please provide existing Protection and Metering scheme for existing 220kV system of each substation.	shall be provided during detail engineering
15	Common	Vol II (Part 1 of 2)	Chapter 1 –Project Specific Requirement	Cl. No. 1.5 Point no.17	It is mentioned that "FFPH & water Tank are not envisaged in the present scope of Contract". Please provide Existing fire fighting system piping layout of each substation or please mention the maximum length between 400kV GIS area to main fire water header (under 220kV package).	shall be provided during detail engineering
16	Common	Vol II	Chapter 19 – Fiber Optic Based	Section 1	This chapter specifies "For 400kV New Khimti–Barhabise, Barhabise-Lapsiphedi D/C Lines currently to be charged at 220 kV Voltage level".	400kV New Khimti–Barhabise, Barhabise-Lapsiphedi D/C Lines is under construction by NEA's other Project. Previously these lines were

Clarification no. 1						
S. N.	**Substation**	**Vol**	**Sec / Chapter**	**Clause**	**Bidder's Queries**	**NEA's Response**
		(Part 2 of 2)	Communication Equipments		Please clarify whether the statement is correct. If yes, please clarify the scheme further and its impact on the BOQ.	supposed to charge at 220 kV Voltage level and accordingly 220 kV Substations with 220 kV line bays at New Khimti,Barhabise and Lapsiphdi is also under construction by NEA's other Projects. Under present scope of the contract, above 400 kV lines shall be charged at 400 kV Voltage level with construction of New 400 kV substations with 400kV line bays at New Khimti,Barhabise and Lapsiphdi.
17	Common	Vol II (Part 2 of 2)	Chapter 19 – Fiber Optic Based Communication Equipments	Section 1	This document describes the general technical specifications for Communication Equipment which includes Fiber Optic Terminal Equipment and Multiplexer Equipments for Establishment of Fiber Optic Communication System. Please mention that FOT multiplexers, PABX, etc. will be required in 400kv substation.	Integration of all 400/220kV Bays under present scope with the SCADA of SIEMENS (SINAUT Spectrum) at Load Dispatch Centre, Kathmandu including supply of Hardware, Software, accessories etc. all complete as per Technical Specification is under present scope of contract.
18	Common	Drawings			Please clarify whether conductor connection with accessories between 400kV Dead end tower and 400kV line gantry tower are within the present scope of work.	Supply and Erection of conductor, String Insulators with necessary hardwares required to connect 400kV Dead end towers and 400kV line bay gantries is envisaged under present scope of work.
19	Barhabise & Lapsiphedi Substation	Vol II (Part 1 of 2) and Drawing	Chapter 1 –Project Specific Requirement	Cl. No. 1.5	In Cl. No. 1.5, Point no. 23, it is mentioned that, "400 kV Double Dead end Transmission Tower Structure, Standard gantry structures (Beams & Columns) and Equipment support structures shall be prepared by the contractor and put up for approval of NEA during detailed engineering." But in Electrical Layout Plan of Barhabise substation & Lapsiphedi Substation, the 400kV dead end tower is shown as 'Existing'. Please confirm that 400kV dead end towers are not included in the scope of work .	Please refer Vol II, Chapter-1 PSR Clause 11 Specific Requirement item no. 9, page-35
20	Common				Technical data-sheet of 30kV surge arrester is not available in technical specification. Please provide the same.	shall be finalized during detail engineering.
21	Common	Vol II (Part 2 of 2)	Chapter 7 –LT Switchgear	Clause No. 1.28	In the referred clause, in case of 400 V Main switchboard and ACDB it is mentioned that "Automatic Changeover between Incomer I & Incomer II is to be carried out during failure of supply in one/or both the incomers." But as per Bid price schedule only one (1) no. of 33/0.4kV, 630KVA LT Transformer is considered. Please clarify whether the Main Switchboard will receive another power supply from the 220kV package and vice versa.	Bidders understanding is generally in order.
22	New Khimti Substation	Bid Price Schedule	Schedule – 1 & Schedule – 4	Item No. E1	The quantity of 336kV Surge Arrestor are mentioned as follows: As per Price Schedule – 1 (Supply BOQ) = 12 nos. As per Price Schedule – 4 (Installation BOQ) = 6 nos. But as per SLD & Electrical Layout, requirement of 336kV Surge Arrestor is 9 nos. (Considering present scope only) Please confirm the exact requirement.	Bidder is to quote as per BPS
23	Barhabise Substation	Bid Price Schedule And Drawings			The quantity of 336kV Surge arrester is given 18 nos. in BPS. If we consider future transformer bay in present scope, the required quantity of Surge Arrester should be 21 nos. Please clarify whether the SA for the future Transformer are to be considered.	Bidder is to quote as per BPS
		Bid Price	Control Relay and	Item No. I	As per BPS, The quantity of CB relay panel with auto-reclosing is given 2 nos.	Bidder is to quote as per BPS

Clarification no. 1						
S. N.	**Substation**	**Vol**	**Sec / Chapter**	**Clause**	**Bidder's Queries**	**NEA's Response**
	Substation	Schedule	protection panels		As per SLD, we are observed that for 2 nos. Line & 1 no. Tie feeder the CB relay panel with auto-reclosing should be required 3 nos. Please confirm the quantity.	
25	Barhabise Substation	Bid Price Schedule	Control Relay and protection panels	Item No. I	As per BPS, The quantity of CB relay panel with auto-reclosing and without auto-reclosing are given 4 nos. and 6 nos. respectively. As per SLD, we have observed that for 4 nos. Line & 2 nos. Tie feeders the CB relay panel with auto-reclosing should be 6 nos. Also CB relay panel without auto-reclosing should be required 5 nos. for 2 nos. Auto-Transformer bays, 1 no. shunt reactor bay & 2 nos. tie feeders. Please confirm.	Bidder is to quote as per BPS
26	Lapsiphedi Substation	Bid Price Schedule	Control Relay and protection panels	Item No. I	As per BPS, The quantity of CB relay panel with auto-reclosing and without auto-reclosing are given 4 nos. and 4 nos. respectively. As per SLD, we have observed that for 4 nos. Line & 2 nos. Tie feeders the CB relay panel with auto-reclosing should be required 6 nos. Also CB relay panel without auto-reclosing should be 3 nos. for 2 nos. Auto-Transformer bays & 1 no. tie feeder. Please confirm.	Bidder is to quote as per BPS
27	New Khimti Substation	Drawings and Bid Price Schedule	Electrical Layout plan of New Khimti Substation		It is observed that the 220kV Incomer side is exactly opposite of 400kV Switchyard. It is also shown that 220kV Cable are terminated into the 220kV GIS in line bay which will be replaced by ICT bay under present scope of work. However, in BPS item no. B.a(1), 360m of single phase 220kV Gas Insulated Bus duct has been specified. Also, in BPS item no. B.b(1), 6 nos. SF6 to Air bushing is indicated. Kindly clarify in which portion between 400/220kV ICT and 220kV ICT GIS bays the gas insulated bus duct will be used. During our site visit, it appeared that it will be easier to connect between 400/220kV Transformer LV side and existing 220kV GIS by cables. Hence, please clarify the requirement of 220kV Bus duct as well as SF6 to air bushing for Connecting GIS to AIS.	Layouts provided in bid document are tentative only. Layout arrangement can be changed considering technical requirements during detail engineering. Regarding choice of Cable and Bus duct for 220kV Connection, Please refer Vol II, Chapter-1 PSR S.N. 26 page-38
28	Barhabise Substation	Drawings and Bid Price Schedule	Electrical Layout plan of Barhabise Substation		It is observed from Electrical Layout Plan (Drawing no. BARHABISE/GIS/LAYOUT/2(A)) that the existing 220kV bus duct is being constructed by other contractor upto 220kV Line Gantry. Please confirm that this bus duct can be utilized by the 400kV GIS contractor for connection between 400/220kV ICT and the concerned 220kV Line bay (which will be converted to ICT bay).	Bidders understanding is generally in order.
29	Lapsiphedi Substation	Drawings and Bid Price Schedule	Electrical Layout plan of Lapsiphedi Substation		From Electrical Layout Plan drawing, it is observed that three phase bus duct is considered in the existing 220kV line bay upto the 220kV gantry. Please confirm that this bus duct can be utilized by the 400kV GIS contractor for connection between 400/220kV ICT and the concerned 220kV Line bay. However, since 220kV gas insulated bus duct should be of single phase type as per Technical specification and BOQ of this project, Kindly confirm that 3 phase type 220kV GIB may still be used.	Bidders understanding is generally in order. Regarding 3-phase or 1-phase bus duct, bidder is to quote as per BPS.
30	New Khimti Substation	Vol II (Part 1 of 2) and BPS	Chapter 1 –Project Specific Requirement and BPS Item no. 23.i),a	Cl. No. 1.5.1.C.1.d (Civil works)	In referred clause no., "The size of 400kV GIS Building shall be suitable to accommodate five numbers bays in addition to the maintenance bay." Since 400kV GIS is connected in one and half breaker scheme, Kindly clarify whether 5 nos. bays means 5 nos. diameters.Please also refer the BPS item no. 23.i.a, only 600sqmm. Area is given for GIS hall. If 5 nos. diameters are considered, the GIS diameters cannot be accommodated in the given area. Please clarify.	Bidder is to quote as per BPS
31	Barhabise Substation	Vol II (Part 1 of 2)	Chapter 1 –Project Specific Requirement and BPS Item no. 23.i),a	Cl. No. 1.5.2.C.1.d (Civil works)	In referred clause no., "The size of 400kV GIS Building shall be suitable to accommodate seven numbers bays in addition to the maintenance bay." Since 400kV GIS is connected in one and half breaker scheme, Kindly clarify whether 7 nos. bays means 7 nos. diameters. Since 400kV GIS is connected in one and half breaker scheme, Kindly clarify whether 7 nos. bays means 7 nos. diameters. Please also refer the BPS item no. 23.i.a, only 700sqmm. Area is given for GIS hall. If 7 nos. diameters are considered, the GIS diameters cannot be accommodated in the given area. Please clarify.	Bidder is to quote as per BPS

Clarification no. 1						
S. N.	**Substation**	**Vol**	**Sec / Chapter**	**Clause**	**Bidder's Queries**	**NEA's Response**
					Please also refer the BPS item no. 23.i.a, only 700sqmm. Area is given for GIS hall. If 7 nos. diameters are considered, the GIS diameters cannot be accommodated in the given area. Please clarify.	
32	Lapsiphedi Substation	Vol II (Part 1 of 2)	Chapter 1 –Project Specific Requirement and BPS Item no. 23.i),a	Cl. No. 1.5.3.C.1.d (Civil works)	In referred clause no., "The size of 400kV GIS Building shall be suitable to accommodate five numbers bays in addition to the maintenance bay." Since 400kV GIS is connected in one and half breaker scheme, Kindly clarify whether 5 nos. bays means 5 nos. diameters. Please also refer the BPS item no. 23.i.a, only 700sqmm. Area is given for GIS hall. If 5 nos. diameters are considered, the GIS diameters cannot be accommodated in the given area. Please clarify.	Bidder is to quote as per BPS
33	Common	Bid Price Schedule	Substation Automation System	Item No. J	From the referred Item no. it is understood that the 400kV bays & 220kV bays under present scope will be integrated with the existing Substation automation system of the 220kV package. It is considered that no HMI is required in the 400kV control room for monitoring and remote control of the 400kV GIS and associated LV auxiliaries. It is also considered that monitoring of remote control of both 400kV and 220kV GIS will be done from the Substation control room of 220kV GIS. Please confirm.	Under construction 220 kV substations shall be equipped with Operator Workstations (HMI) along with SAS . Integration of SAS for under construction 220 kV substation with SAS for 400kV substation is present scope of work. So, bidder shall require to supply all necessary hardware and software to integrate with the existing Substation Automation System including up-dation of system database, displays, and development of additional displays and reports alll complete as per requirement. Thus, Bidders are requested to understand accordingly and quote their rates and prices accordingly.
34	Barhabise Substation	General			During site visit to Barhabise substation, it was found that the approach road to the substation lies in very steep gradient of mountains, road has sharp bends with very small turning radii, road has no sub-base and surface of the road is laden with loose rocks. Kindly confirm that NEA shall consider necessary rerouting/repair of the approach road if required during construction phase of the Substation so that transportation of heavy equipment is not blocked due to poor road condition.	NEA's other Project is strengthening the approach road till the sub-station boundary from main highway
35	Lapsiphedi Substation	General			During site visit to Lapsiphedi substation, it was found that the approach road to the substation lies in very steep gradient of mountains, road has sharp bends with very small turning radii, road has no sub-base and surface of the road is laden with loose rocks. Kindly confirm that NEA shall consider necessary rerouting/repair of the approach road if required during construction phase of the Substation so that transportation of heavy equipment is not blocked due to poor road condition.	NEA's other Project is strengthening th approach road till the sub-station boundary from main highway

Nepal Electricity Authority
Project Management Directorate
Khimti-Barhabise-Lapsiphedi 400 kV Substation Project

OCB No.: PMD/PTDSSP/KBL-75/76-01" Design, Supply, Installation and Commissioning of 400 kV Gas Insulated Substations (GIS) at New Khimti, Barhabise and Lapsiphedi"

Set-6

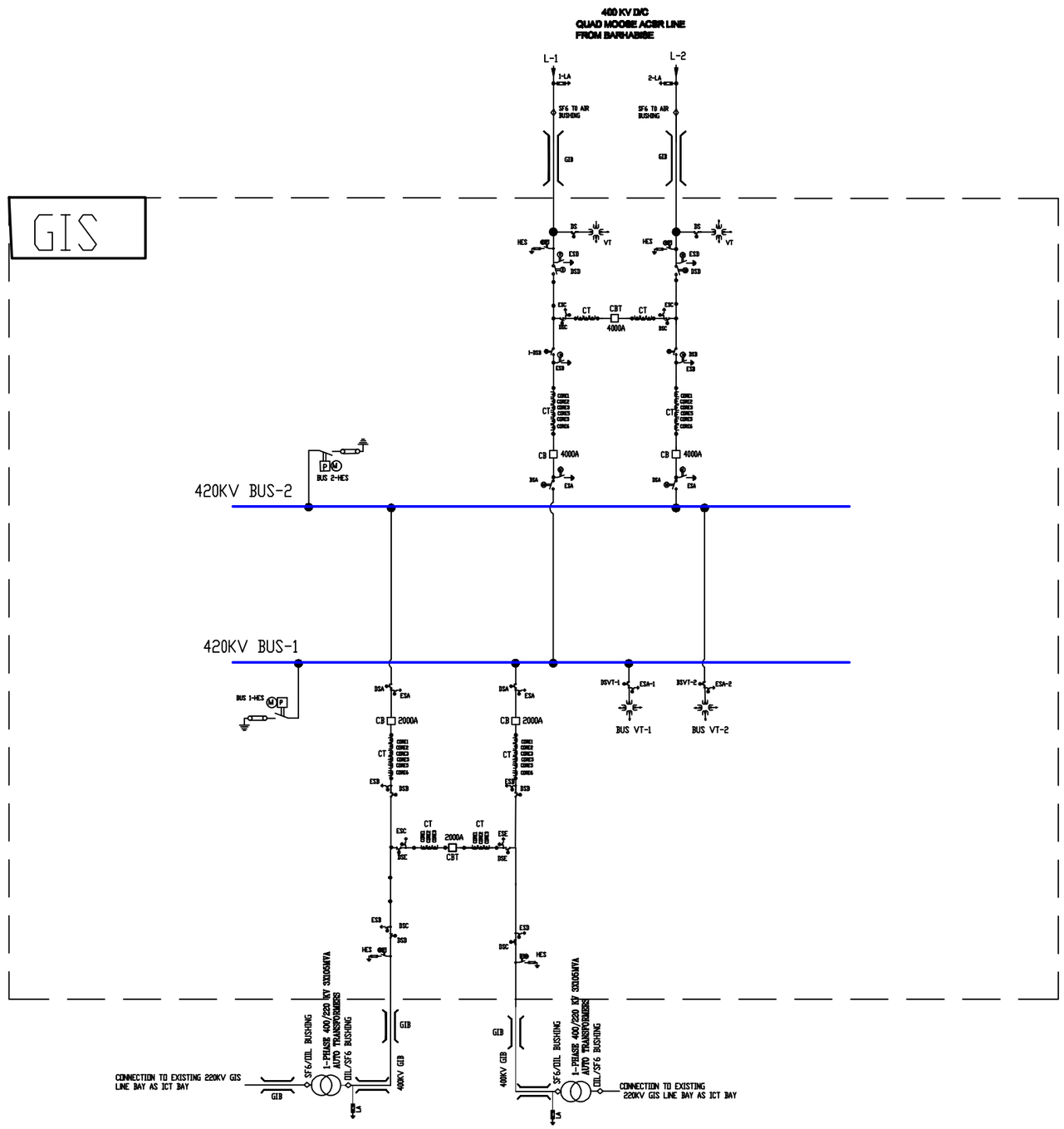
Clarification no. 1

S.NO.	From	SECTION/CLAUSE NO.	SUBSTATION	TEXT AS PER CLAUSE	BIDDER'S QUERIES	NEA RESPONSE
1	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.1.A.19	400kV New Khimti	Fire protection system (HVW spray & hydrant system) for all buildings, 4X105 MVA, 400/√3/220/√3/33kV , 1-Phase Auto Transformer (One bank + One Spare) including extension of main water header (available near existing Fire Fighting Pump House)	Please provide the Existing Fire Hydrant layout drwg showing Existing Fire Pipe header and tapping point which can be extended for HVWS & Hydrant system.	Shall be provided during detail engineering
2	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.1.A.19		Fire protection system (HVW spray & hydrant system) for all buildings, 4X105 MVA, 400/√3/220/√3/33kV , 1-Phase Auto Transformer (One bank + One Spare) including extension of main water header (available near existing Fire Fighting Pump House)	We assume that Existing Pumping Capacity, Pump head and water tank capacity is sufficient to take care the HVWS & Hydrant Fire fighting system. Hence Fire Pumping system is totally excluded from Bidder scope of work. Please confirm.	shall be as per the Provision of Bid Documents
3	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.1.A.19		Fire protection system (HVW spray & hydrant system) for all buildings, 4X105 MVA, 400/√3/220/√3/33kV , 1-Phase Auto Transformer (One bank + One Spare) including extension of main water header (available near existing Fire Fighting Pump House)	We assume that there is the provision in the existing Annunciation Panel located in the existing Fire Pump house & existing Main Control Room building to take the input / output Signal from deluge valve panel of upcoming for HVWS spray system. So New annunciation panels are not required separately. Please confirm.	shall be as per the Provision of Bid Documents
4	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.1.A.19		Fire protection system (HVW spray & hydrant system) for all buildings, 4X105 MVA, 400/√3/220/√3/33kV , 1-Phase Auto Transformer (One bank + One Spare) including extension of main water header (available near existing Fire Fighting Pump	We are considering tapping distance from existing header as 50 meters. Please provide the exact length of tapping to be considered for the extension of Hydrant/ HVWS system.	Shall be finalized during detail engineering
5	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.1.A.19		Fire protection system (HVW spray & hydrant system) for all buildings, 4X105 MVA, 400/√3/220/√3/33kV , 1-Phase Auto Transformer (One bank + One Spare) including extension of main water header (available near existing Fire Fighting Pump House)	We assume that sufficient Fire water pressure & Fire water qty is available at the TOP (take over point)/ Tapping point of Existing Fire Pipe Header which to be extended for Firefighting system. Hence Booster Pump is not envisaged at Tapping point. Please confirm.	shall be as per the Provision of Bid Documents
6	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.1.A.19		Fire protection system (HVW spray & hydrant system) for all buildings, 4X105 MVA, 400/√3/220/√3/33kV , 1-Phase Auto Transformer (One bank + One Spare) including extension of main water header (available near existing Fire Fighting Pump House)	We assume that there is the provision in the existing DCDB Panel located in the existing Fire Pump house & Main Control Room building to provide DC power in the deluge valve panels for HVWS spray system. So DCDB panels are not required separately. Please confirm.	shall be as per the Provision of Bid Documents
7	Price Schedule No 1	Sl. No. O - c		Fire Detection and Alarm system	As per BPS and project scope, location where fire detection and alarm system is to be provided is not given. Therefore we will be providing FDAS system in control room cum administrative building, panel room and GIS Hall. Please confirm.	shall be as per the Provision of Bid Documents
8	Price Schedule No 1	Sl. No. O - b		Smoke Detection system	As per BPS and project scope, location where smoke detection system is to be provided is not given. Therefore we will be providing smoke detection system in control room cum administrative building, panel room and GIS	Shall be finalized during detail engineering
9	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.1.A.26		EOT Crane as per Technical Specification is proposed in the GIS Building	We are considering single girder crane to be provided for GIS Hall. Please confirm.	Please refer clause 16, Vol II chapter 3-GIS Switchgear of Technical Specifications.

Clarification no. 1						
S.NO.	From	SECTION/CLAUSE NO.	SUBSTATION	TEXT AS PER CLAUSE	BIDDER'S QUERIES	NEA RESPONSE
10	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement		Fire Protection system for future scope.	As there is no requirement for Fire Protection system for future scope. Therefore we are not considering any Fire –Protection system for future scope Transformers. Please	shall be as per the Provision of Bid Documents
11	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.2.A.20	400kV Barhabise	Fire protection system (HVW spray & hydrant system) for all buildings, 4X53.33 MVA, 400/√3/220/√3/33kV, 1-Phase Auto Transformer (One bank + One Spare) and 1nos. 420kV, 50MVAR Reactors including extension of main water header (available near existing Fire Fighting Pump House)	Please provide the Existing Fire Hydrant layout drwg showing Existing Fire Pipe header and tapping point which can be extended for HVWS & Hydrant system.	Shall be provided during detail engineering
12	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.2.A.20		Fire protection system (HVW spray & hydrant system) for all buildings, 4X53.33 MVA, 400/√3/220/√3/33kV, 1-Phase Auto Transformer (One bank + One Spare) and 1nos. 420kV, 50MVAR Reactors including extension of main water header (available near existing Fire Fighting Pump House)	We assume that Existing Pumping Capacity, Pump head and water tank capacity is sufficient to take care the HVWS & Hydrant Fire fighting system. Hence Fire Pumping system is totally excluded from Bidder scope of work. Please confirm.	shall be as per the Provision of Bid Documents
13	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.2.A.20		Fire protection system (HVW spray & hydrant system) for all buildings, 4X53.33 MVA, 400/√3/220/√3/33kV, 1-Phase Auto Transformer (One bank + One Spare) and 1nos. 420kV, 50MVAR Reactors including extension of main water header (available near existing Fire Fighting Pump House)	We assume that there is the provision in the existing Annunciation Panel located in the existing Fire Pump house & existing Main Control Room building to take the input / output Signal from deluge valve panel of upcoming for HVWS spray system. So New annunciation panels are not required separately. Please confirm.	shall be as per the Provision of Bid Documents
14	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.2.A.20		Fire protection system (HVW spray & hydrant system) for all buildings, 4X53.33 MVA, 400/√3/220/√3/33kV, 1-Phase Auto Transformer (One bank + One Spare) and 1nos. 420kV, 50MVAR Reactors including extension of main water header (available	We are considering tapping distance from existing header as 50 meters. Please provide the exact length of tapping to be considered for the extension of Hydrant/ HVWS system.	Shall be finalized during detail engineering
15	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.2.A.20		Fire protection system (HVW spray & hydrant system) for all buildings, 4X53.33 MVA, 400/√3/220/√3/33kV, 1-Phase Auto Transformer (One bank + One Spare) and 1nos. 420kV, 50MVAR Reactors including extension of main water header (available	We assume that sufficient Fire water pressure & Fire water qty is available at the TOP (take over point)/ Tapping point of Existing Fire Pipe Header which to be extended for Firefighting system. Hence Booster Pump is not envisaged	shall be as per the Provision of Bid Documents
16	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.2.A.20		Fire protection system (HVW spray & hydrant system) for all buildings, 4X53.33 MVA, 400/√3/220/√3/33kV, 1-Phase Auto Transformer (One bank + One Spare) and 1nos. 420kV, 50MVAR Reactors including extension of main water header (available	We assume that there is the provision in the existing DCDB Panel located in the existing Fire Pump house & Main Control Room building to provide DC power in the deluge valve panels for HVWS spray system. So DCDB panels are	shall be as per the Provision of Bid Documents
17	Price Schedule No 1	Sl. No. P - c		Fire Detection and Alarm system	As per BPS and project scope, location where fire detection and alarm system is to be provided is not given. Therefore we will be providing FDAS system in control room cum administrative building, panel room and GIS Hall. Please confirm.	shall be as per the Provision of Bid Documents
18	Price Schedule No 1	Sl. No. P - b		Smoke Detection system	As per BPS and project scope, location where smoke detection system is to be provided is not given. Therefore we will be providing smoke detection system in control room cum administrative building, panel room and GIS Hall. Please confirm.	shall be as per the Provision of Bid Documents
19	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.2.A.26		EOT Crane as per Technical Specification is proposed in the GIS Building	We are considering single girder crane to be provided for GIS Hall. Please confirm.	Please refer clause 16, Vol II chapter 3-GIS Switchgear of Technical Specifications.
20	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement		Fire Protection system for future scope.	As there is no requirement for Fire Protection system for future scope. Therefore we are not considering any Fire –Protection system for future scope Transformers. Please	shall be as per the Provision of Bid Documents

Clarification no. 1						
S.NO.	**From**	**SECTION/CLAUSE NO.**	**SUBSTATION**	**TEXT AS PER CLAUSE**	**BIDDER'S QUERIES**	**NEA RESPONSE**
21	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.3.A.19	400kV Lapsiphedi	Fire protection system (HVW spray & hydrant system) for all buildings, 4X53.33MVA, 400/√3/220/√3/33kV , 1-Phase Auto Transformer (One bank + One Spare) including extension of main water header (available near existing Fire Fighting Pump House)	Please provide the Existing Fire Hydrant layout drwg showing Existing Fire Pipe header and tapping point which can be extended for HVWS & Hydrant system.	Shall be provided during detail engineering
22	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.3.A.19		Fire protection system (HVW spray & hydrant system) for all buildings, 4X53.33MVA, 400/√3/220/√3/33kV , 1-Phase Auto Transformer (One bank + One Spare) including extension of main water header (available near existing Fire Fighting Pump House)	We assume that Existing Pumping Capacity, Pump head and water tank capacity is sufficient to take care the HVWS & Hydrant Fire fighting system. Hence Fire Pumping system is totally excluded from Bidder scope of work. Please confirm.	shall be as per the Provision of Bid Documents
23	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.3.A.19		Fire protection system (HVW spray & hydrant system) for all buildings, 4X53.33MVA, 400/√3/220/√3/33kV , 1-Phase Auto Transformer (One bank + One Spare) including extension of main water header (available near existing Fire Fighting Pump House)	We assume that there is the provision in the existing Annunciation Panel located in the existing Fire Pump house & existing Main Control Room building to take the input / output Signal from deluge valve panel of upcoming for HVWS spray system. So New annunciation panels are not required separately. Please confirm.	shall be as per the Provision of Bid Documents
24	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.3.A.19		Fire protection system (HVW spray & hydrant system) for all buildings, 4X53.33MVA, 400/√3/220/√3/33kV , 1-Phase Auto Transformer (One bank + One Spare) including extension of main water header (available near existing Fire Fighting Pump House)	We are considering tapping distance from existing header as 50 meters. Please provide the exact length of tapping to be considered for the extension of Hydrant/ HVWS system.	Shall be provided during detail engineering
25	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.3.A.19		Fire protection system (HVW spray & hydrant system) for all buildings, 4X53.33MVA, 400/√3/220/√3/33kV , 1-Phase Auto Transformer (One bank + One Spare) including extension of main water header (available near existing Fire Fighting Pump House)	We assume that sufficient Fire water pressure & Fire water qty is available at the TOP (take over point)/ Tapping point of Existing Fire Pipe Header which to be extended for Firefighting system. Hence Booster Pump is not envisaged at Tapping point. Please confirm.	shall be as per the Provision of Bid Documents
26	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement – Cl. No. 1.5.3.A.19		Fire protection system (HVW spray & hydrant system) for all buildings, 4X53.33MVA, 400/√3/220/√3/33kV , 1-Phase Auto Transformer (One bank + One Spare) including extension of main water header (available near existing Fire Fighting Pump House)	We assume that there is the provision in the existing DCDB Panel located in the existing Fire Pump house & Main Control Room building to provide DC power in the deluge valve panels for HVWS spray system. So DCDB panels are not required separately. Please confirm.	shall be as per the Provision of Bid Documents
27	Price Schedule No 1	Sl. No. P - c		Fire Detection and Alarm system	As per BPS and project scope, location where fire detection and alarm system is to be provided is not given. Therefore we will be providing FDAS system in control room cum administrative building, panel room and GIS Hall. Please confirm.	shall be as per the Provision of Bid Documents
28	Price Schedule No 1	Sl. No. P - b		Smoke Detection system	As per BPS and project scope, location where smoke detection system is to be provided is not given. Therefore we will be providing smoke detection system in control room cum administrative building, panel room and GIS Hall. Please confirm.	shall be as per the Provision of Bid Documents
29		Chapter 1 – Project Specific Requirement – Cl. No. 1.5.3.A.26		EOT Crane as per Technical Specification is proposed in the GIS Building	We are considering single girder crane to be provided for GIS Hall. Please confirm.	Please refer clause 16, Vol II chapter 3-GIS Switchgear of Technical Specifications.
30	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement		Fire Protection system for future scope.	As there is no requirement for Fire Protection system for future scope. Therefore we are not considering any Fire –Protection system for future scope Transformers. Please confirm.	shall be as per the Provision of Bid Documents
					Air- Conditioning heat load calculation shall be done on the	shall be as per the Provision of Bid Documents

Clarification no. 1						
S.NO.	**From**	**SECTION/CLAUSE NO.**	**SUBSTATION**	**TEXT AS PER CLAUSE**	**BIDDER'S QUERIES**	**NEA RESPONSE**
31	Volume II – Part 1 of 2	Chapter 1 – Project Specific Requirement		Air Conditioning System for control room cum administrative building, panel room and Ventilation system for GIS hall.	basis of max site temperature(40 deg C) and unit will satisfactory work up to ambient temperature i.e. 45 deg C. Please confirm.	



LEGEND:-

	GAS INSULATED BUS DUCT(GIB)
	HIGH SPEED GROUNDING SWITCH
	LIGHTENING ARRESTOR(LA)
	BUSHINGS(SF6/AIR,SF6/OIL AND OIL/AIR
	EARTHING SWITCH
	GROUNDING SWITCH
	DISCONNECTOR
	AUTO TRANSFORMER
	CURRENT TRANSFORMER
	CIRCUIT BREAKER
	CAPCITIVE VOLTAGE TRANSFORMER
	SHUNT REACTOR
	VT

GENERAL NOTES

1. THIS DRAWING INDICATES A SINGLE LINE DIAGRAM FOR 420 KV GAS INSULATED SUBSTATION.

2.THIS DRAWING IS INDICATIVE ONLY. THE BIDDER SHALL SUBMIT DETAILED DRAWING INDICATING LOCATION OF CIRCUIT BREAKERS, CVT, LA, CTS, HIGH SPEED GROUNDING SWITCHES, DISCONNECTORS ETC. ALONGWITH THEIR TECHNICAL PARTICULARS.

3. CT PARAMETER ARE GIVEN IN THE TECHNICAL SPECIFICATION ARE MINIMUM REQUIREMENTS .HOWEVER, THE CT PARAMETERS WILL BE REVIEWED DURING DETAILED ENGINEERING.

FOR TENDER PURPOSE ONLY

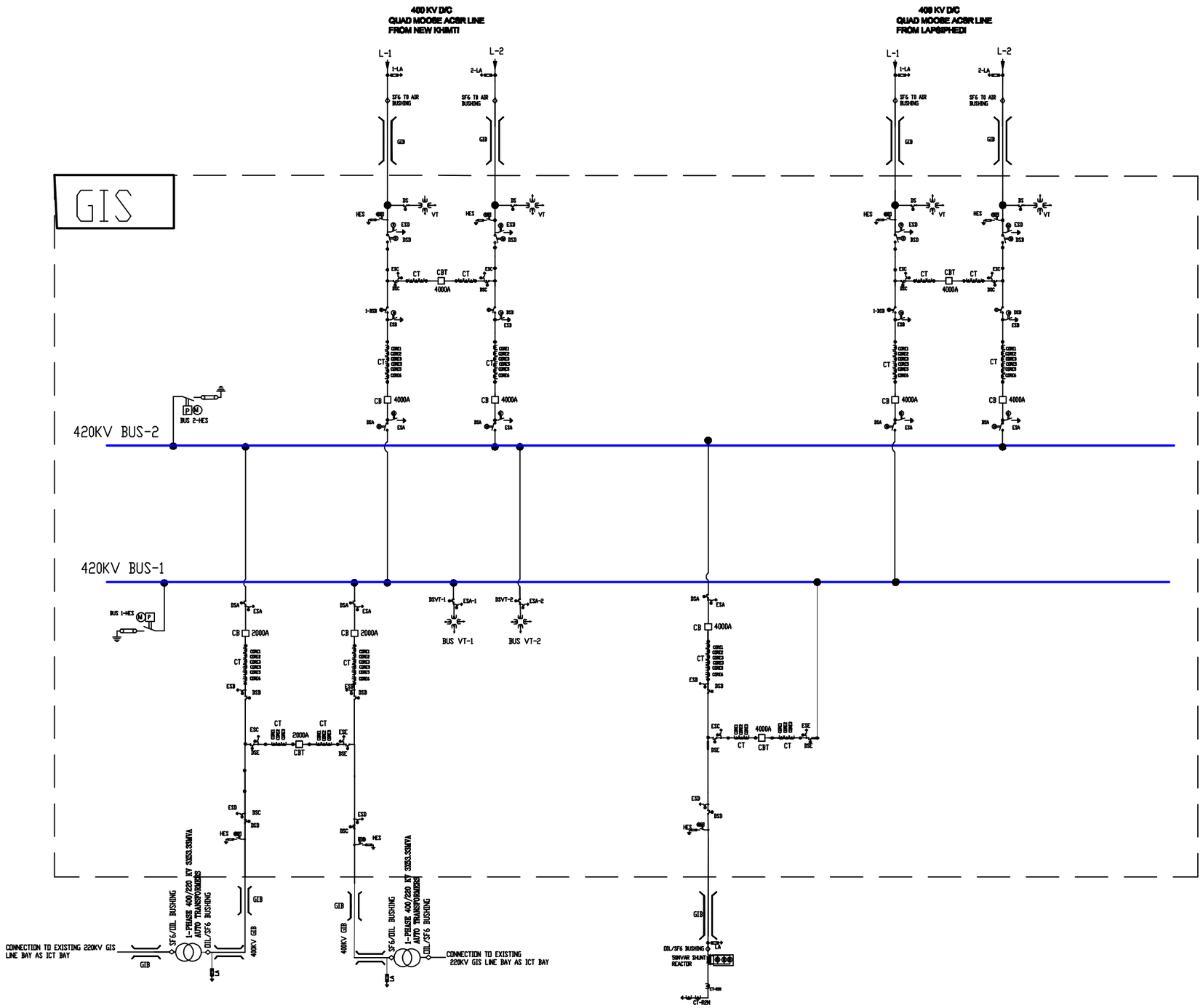
REV	DATE	MODIFICATION
1		

NEPAL ELECTRICITY AUTHORITY

400 KV GIS NEW NEW KHIMTI SUBSTATION

SINGLE LINE DIAGRAM

DRAWING No. KHIMTI-GIS-SLD-1



LEGEND:-

	GAS INSULATED BUS DUCT(GIB)
	HIGH SPEED GROUNDING SWITCH
	LIGHTENING ARRESTOR(LA)
	BUSHINGS(SF6/AIR,SF6/OIL AND OIL/AIR
	EARTHING SWITCH
	GROUNDING SWITCH
	DISCONNECTOR
	AUTO TRANSFORMER
	CURRENT TRANSFORMER
	CIRCUIT BREAKER
	CAPCITIVE VOLTAGE TRANSFORMER
	SHUNT REACTOR
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GENERAL NOTES

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2.THIS DRAWING IS INDICATIVE ONLY. THE BIDDER SHALL SUBMIT DETAILED DRAWING INDICATING LOCATION OF CIRCUIT BREAKERS, CVT, LA, CTS, HIGH SPEED GROUNDING SWITCHES, DISCONNECTORS ETC. ALONGWITH THEIR TECHNICAL PARTICULARS.

3. CT PARAMETER ARE GIVEN IN THE TECHNICAL SPECIFICATION ARE MINIMUM REQUIREMENTS .HOWEVER, THE CT PARAMETERS WILL BE REVIEWED DURING DETAILED ENGINEERING.

FOR TENDER PURPOSE ONLY

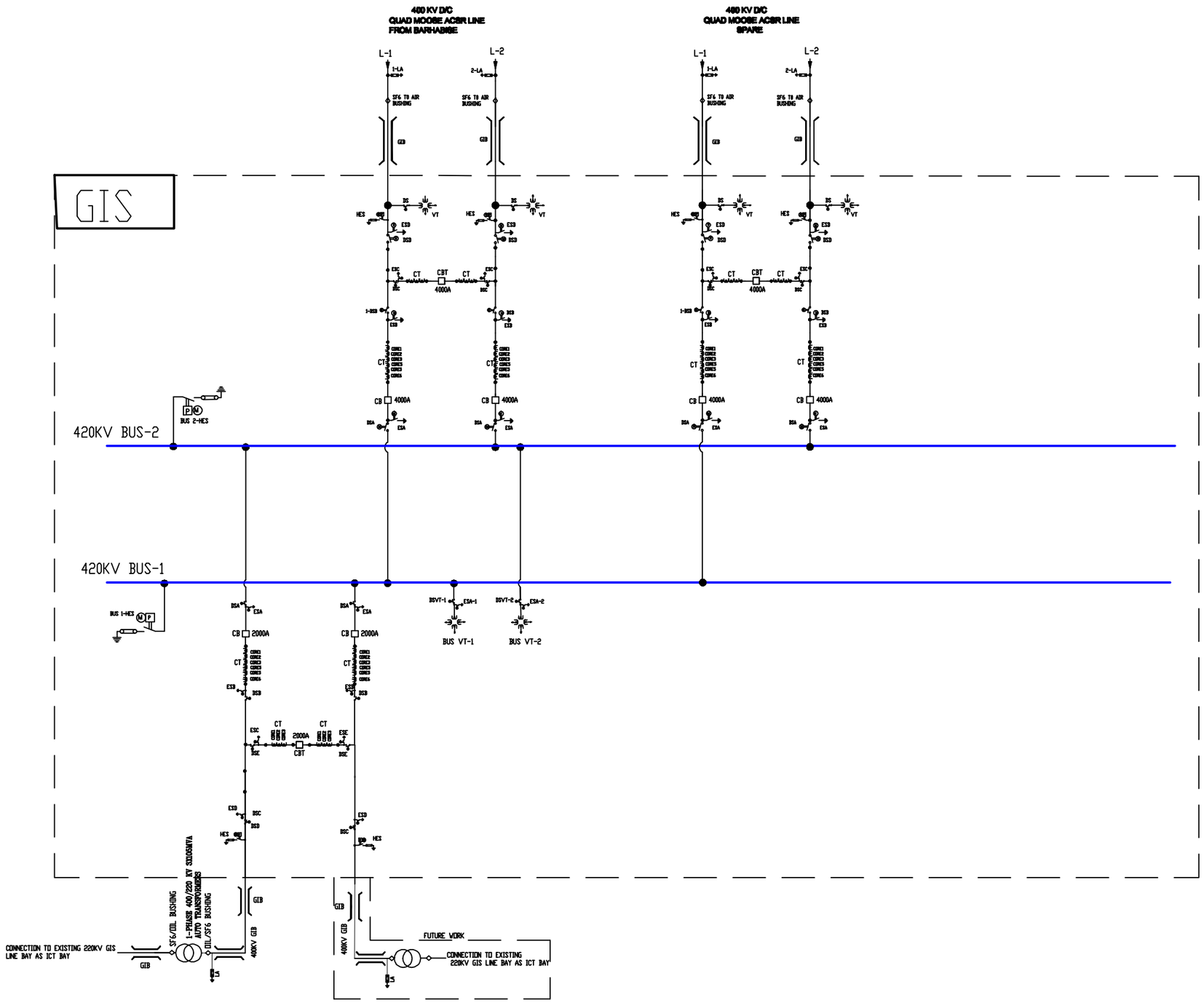
REV	DATE	MODIFICATION
1		

NEPAL ELECTRICITY AUTHORITY

400 KV GIS NEW BARHABISE SUBSTATION

SINGLE LINE DIAGRAM

DRAWING No. **BARHABISE-GIS-SLD-1**



LEGEND:-

	GAS INSULATED BUS DUCT(GIB)
	HIGH SPEED GROUNDING SWITCH
	LIGHTENING ARRESTOR(LA)
	BUSHINGS(SF6/AIR,SF6/OIL AND OIL/AIR
	EARTHING SWITCH
	GROUNDING SWITCH
	DISCONNECTOR
	AUTO TRANSFORMER
	CURRENT TRANSFORMER
	CIRCUIT BREAKER
	CAPCITIVE VOLTAGE TRANSFORMER
	SHUNT REACTOR
	VT

GENERAL NOTES

1. THIS DRAWING INDICATES A SINGLE LINE DIAGRAM FOR 420 KV GAS INSULATED SUBSTATION.

2.THIS DRAWING IS INDICATIVE ONLY. THE BIDDER SHALL SUBMIT DETAILED DRAWING INDICATING LOCATION OF CIRCUIT BREAKERS, CVT, LA, CTS, HIGH SPEED GROUNDING SWITCHES, DISCONNECTORS ETC. ALONGWITH THEIR TECHNICAL PARTICULARS.

3. CT PARAMETER ARE GIVEN IN THE TECHNICAL SPECIFICATION ARE MINIMUM REQUIREMENTS .HOWEVER, THE CT PARAMETERS WILL BE REVIEWED DURING DETAILED ENGINEERING.

FOR TENDER PURPOSE ONLY

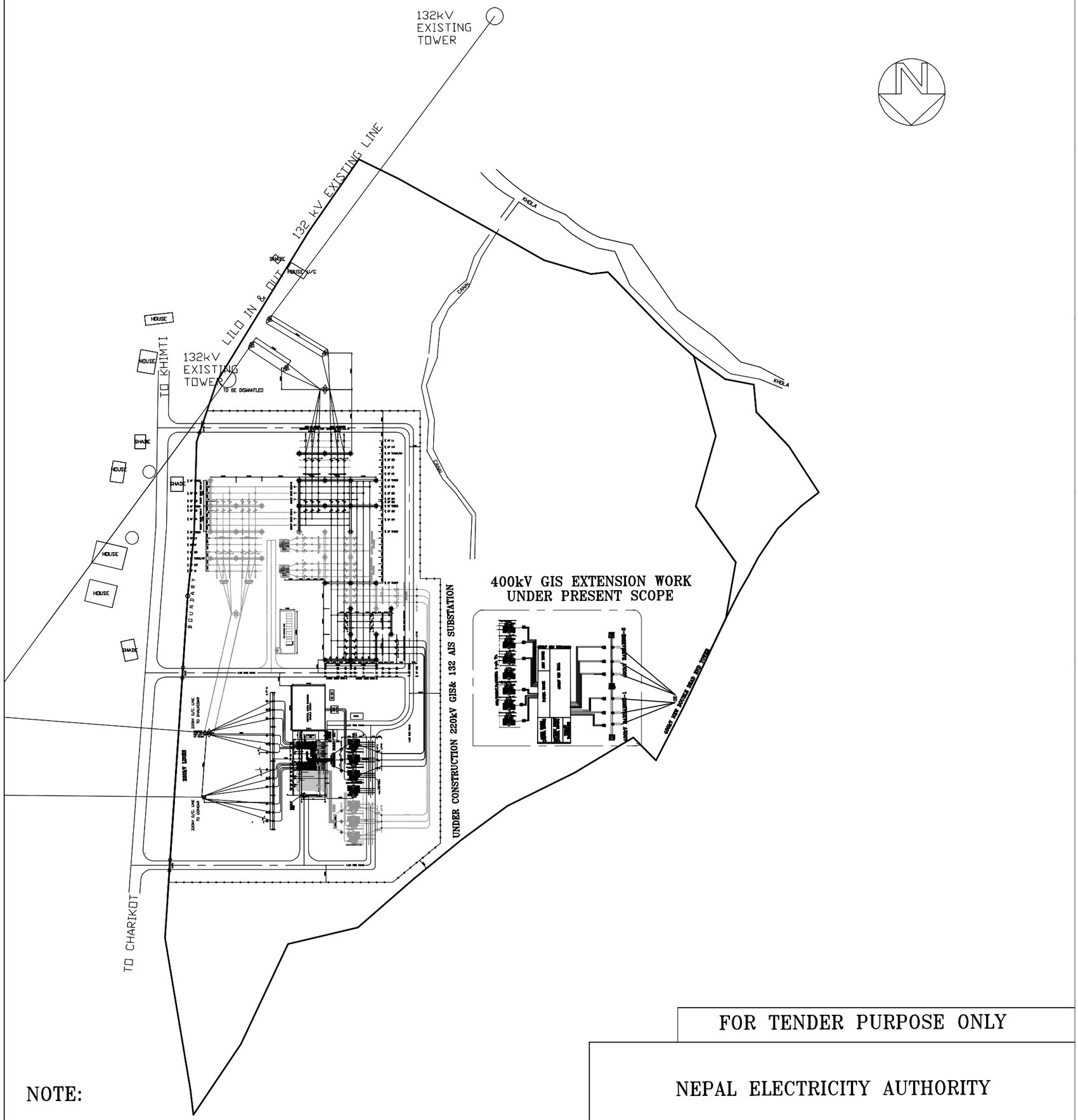
REV	DATE	MODIFICATION
1		

NEPAL ELECTRICITY AUTHORITY

400 KV GIS NEW LAPSIPHEDI SUBSTATION

SINGLE LINE DIAGRAM

DRAWING No. BARHABISE-GIS-SLD-1



NOTE:

1. TAKE OFF OF 400kV LINE IS TENTATIVE,SAME SHALL BE FINALISED DURING DETAIL ENGINEERING
2. EHV CABLE, 220kv BUS DUCT IS NOT SHOWN,SAME AS PER TECHNICAL SPECIFICATIONS
3. CONNECTION OF 220kV SIDE OF 400/220kV TRANS. TO EXISTING 220kV LINE BAYS(WHICH SHALL BE USED AS 220kV ICT BAYS) HAS NOT BEEN SHOWN,SAME SHALL BE AS PER PSR AND SPECIFICATIONS
4. DRAWING IS NOT IN SCALE

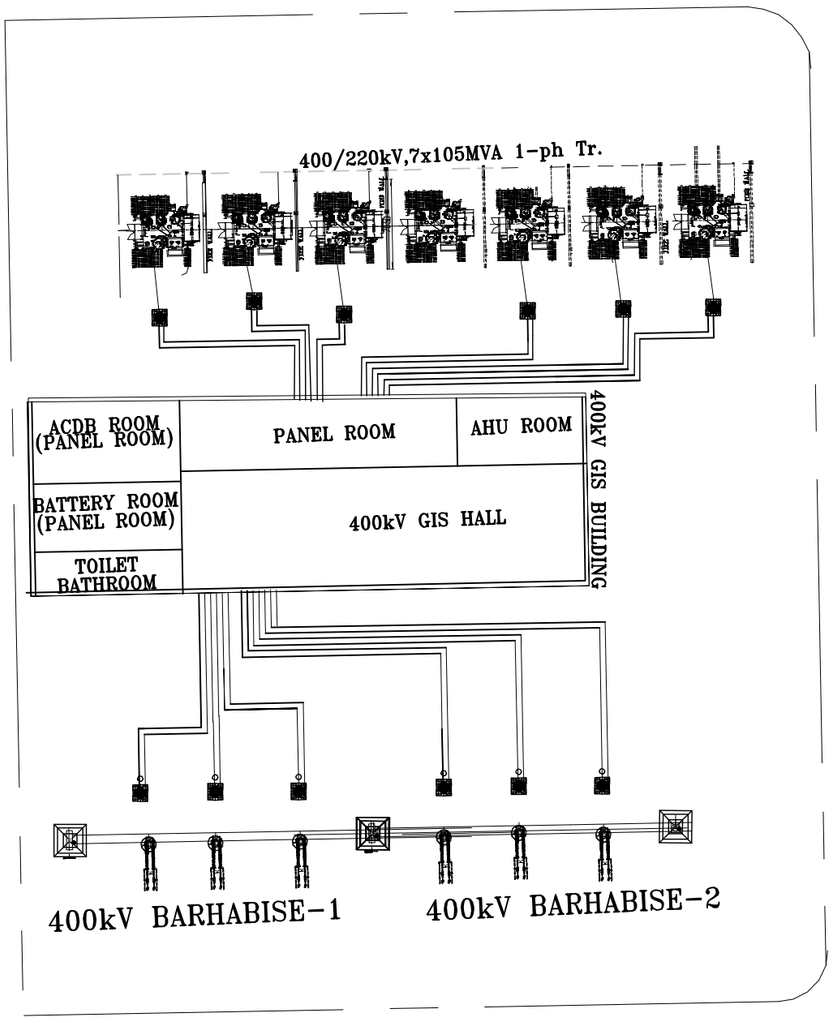
FOR TENDER PURPOSE ONLY

NEPAL ELECTRICITY AUTHORITY

ELECTRICAL LAYOUT PLAN OF

400kV NEW KHIMTI SUBSTATION

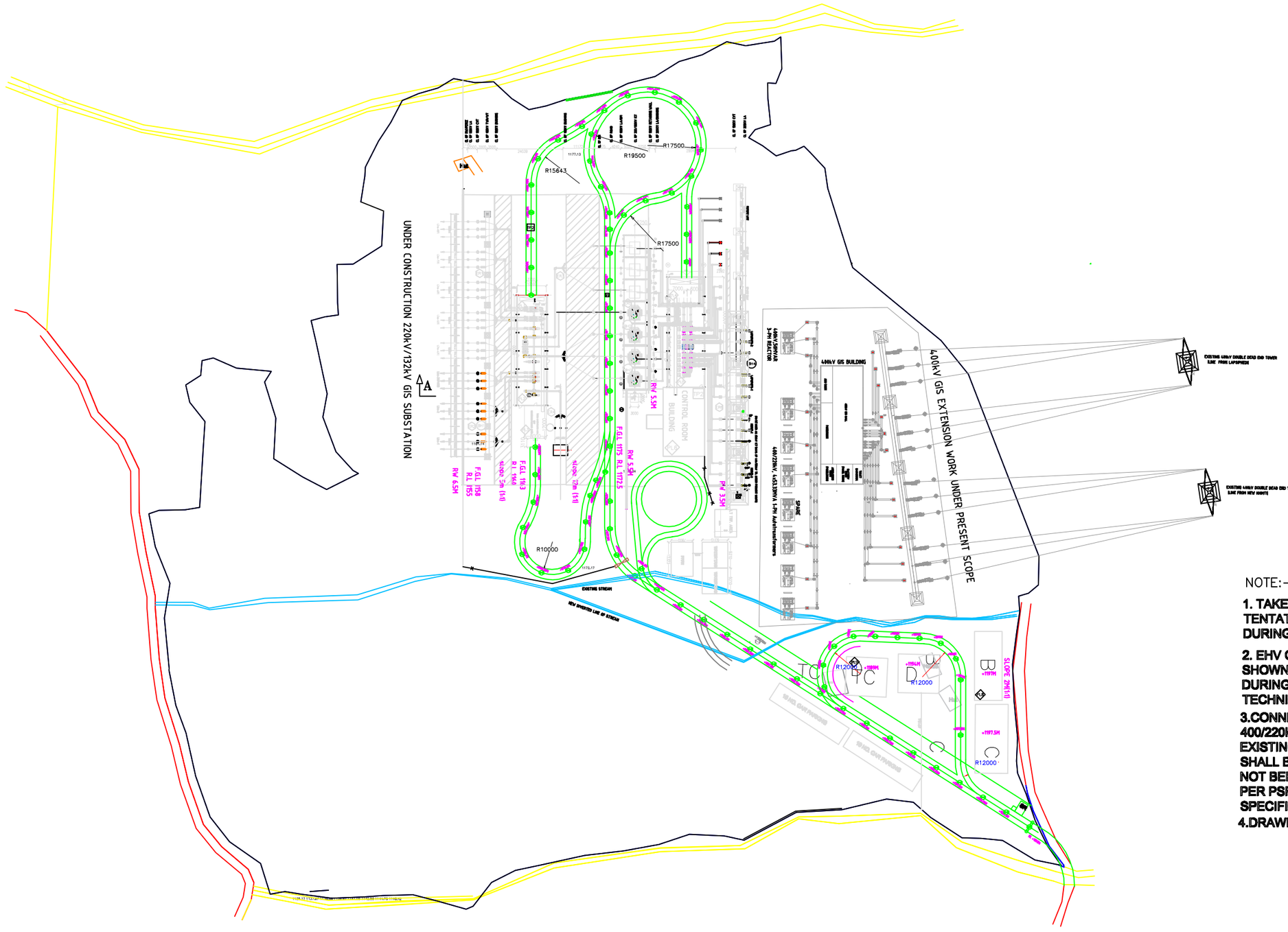
DRAWING NO.NEW KHIMTI-GIS-LAYOUT-02(A)



NOTE:

1. EHV CABLE, 220kv BUS DUCT IS NOT SHOWN,SAME AS PER TECHNICAL SPECIFICATIONS
2. CONNECTION OF 220kV SIDE OF 400/220kV TRANS. TO EXISTING 220kV LINE BAYS(WHICH SHALL BE USED AS 220kV ICT BAYS) HAS NOT BEEN SHOWN,SAME SHALL BE AS PER PSR AND SPECIFICATIONS
3. DRAWING IS NOT IN SCALE

FOR TENDER PURPOSE ONLY
NEPAL ELECTRICITY AUTHORITY
ELECTRICAL LAYOUT PLAN OF 400kV NEW KHIMTI SUBSTATION
DRAWING NO.NEW KHIMTI-GIS-LAYOUT-02(B)



NOTE:–

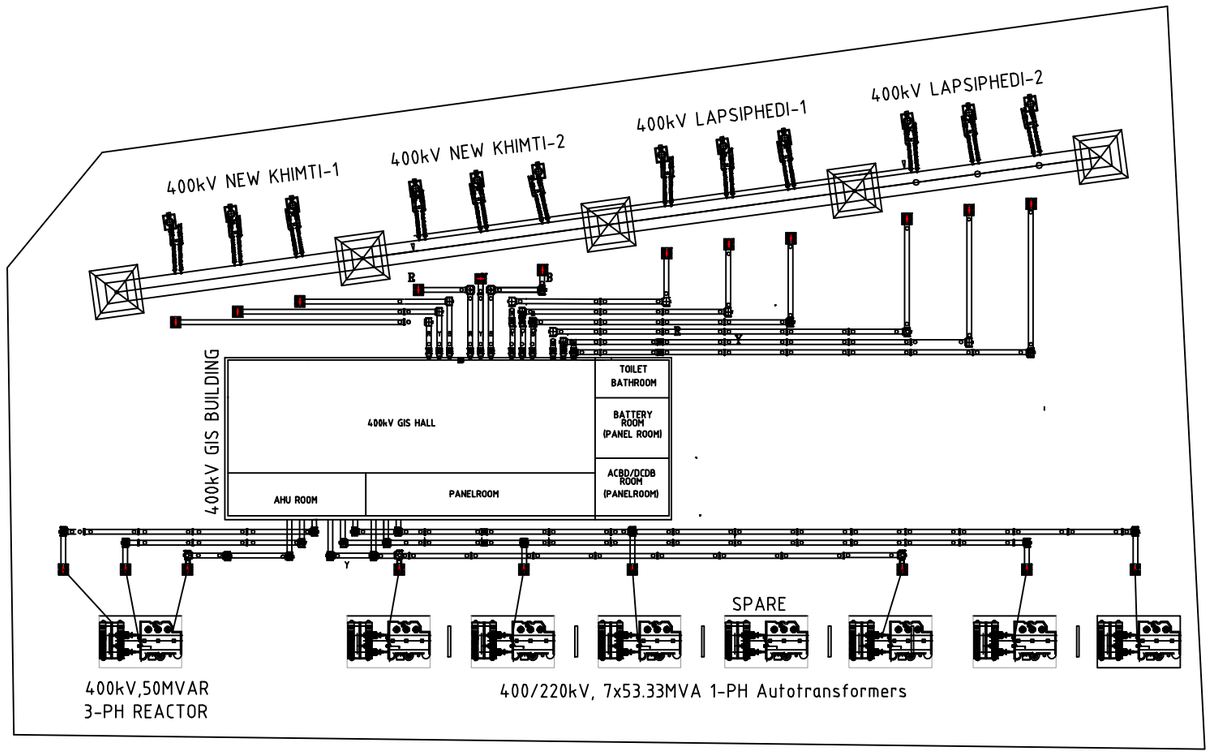
1. TAKE OFF OF 400kV LINE IS TENTATIVE,SAME SHALL BE FINALIZED DURING DETAIL ENGINEERING
2. EHV CABLE,220kV BUS DUCT IS NOT SHOWN,SAME SHALL BE FINALIZED DURING DETAIL ENGINEERING AS PER TECHNICAL SPECIFICATIONS
3. CONNECTION OF 220kV SIDE OF 400/220kV TRANSFORMER TO EXISTING 220kV LINE BAYS(WHICH SHALL BE USED AS ICT BAYS) HAS NOT BEEN SHOWN,SAME SHALL BE AS PER PSR AND TECHNICAL SPECIFICATIONS
4. DRAWING IS NOT IN SCALE

FOR TENDER PURPOSE ONLY

NEPAL ELECTRICITY AUTHORITY

ELECTRICAL LAYOUT PLAN OF 400kV BARHABISE SUBSTATION

DRAWING NO.: BARHABISE–GIS–LAYOUT–2(A)



NOTE:—

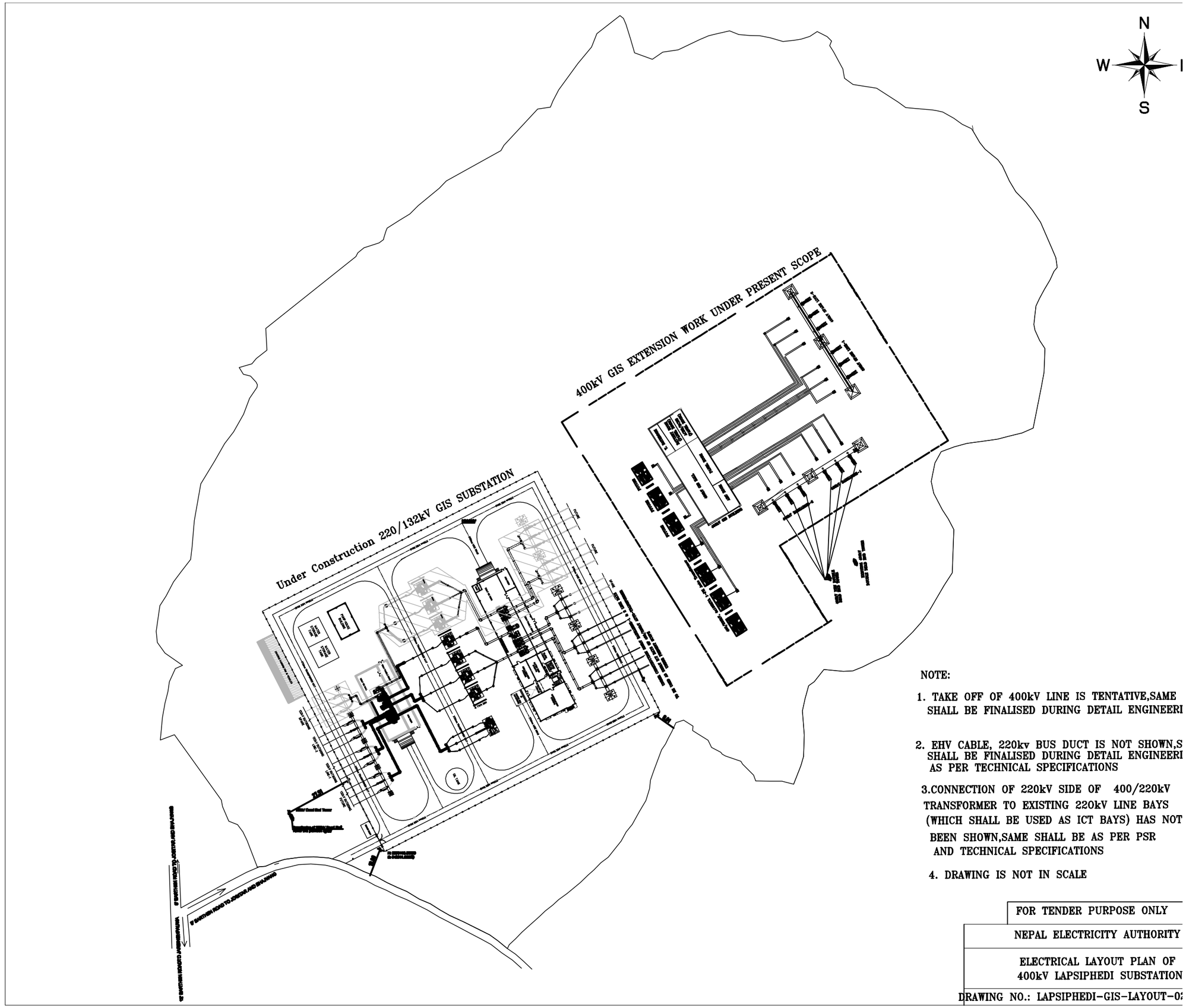
1. EHV CABLE,220kV BUS DUCT IS NOT SHOWN,SAME SHALL BE FINALIZED DURING DETAIL ENGINEERING AS PER TECHNICAL SPECIFICATIONS
2. CONNECTION OF 220kV SIDE OF 400/220kV TRANSFORMER TO EXISTING 220kV LINE BAYS(WHICH SHALL BE USED AS ICT BAYS) HAS NOT BEEN SHOWN,SAME SHALL BE AS PER PSR AND TECHNICAL SPECIFICATIONS
3. DRAWING IS NOT IN SCALE

FOR TENDER PURPOSE ONLY

NEPAL ELECTRICITY AUTHORITY

ELECTRICAL LAYOUT PLAN OF 400kV BARHABISE SUBSTATION

DRAWING NO.: BARHABISE—GIS—LAYOUT—2(B)



NOTE:

1. TAKE OFF OF 400kV LINE IS TENTATIVE,SAME SHALL BE FINALISED DURING DETAIL ENGINEERI

2. EHV CABLE, 220kv BUS DUCT IS NOT SHOWN,S SHALL BE FINALISED DURING DETAIL ENGINEERI AS PER TECHNICAL SPECIFICATIONS

3.CONNECTION OF 220kV SIDE OF 400/220kV TRANSFORMER TO EXISTING 220kV LINE BAYS (WHICH SHALL BE USED AS ICT BAYS) HAS NOT BEEN SHOWN,SAME SHALL BE AS PER PSR AND TECHNICAL SPECIFICATIONS

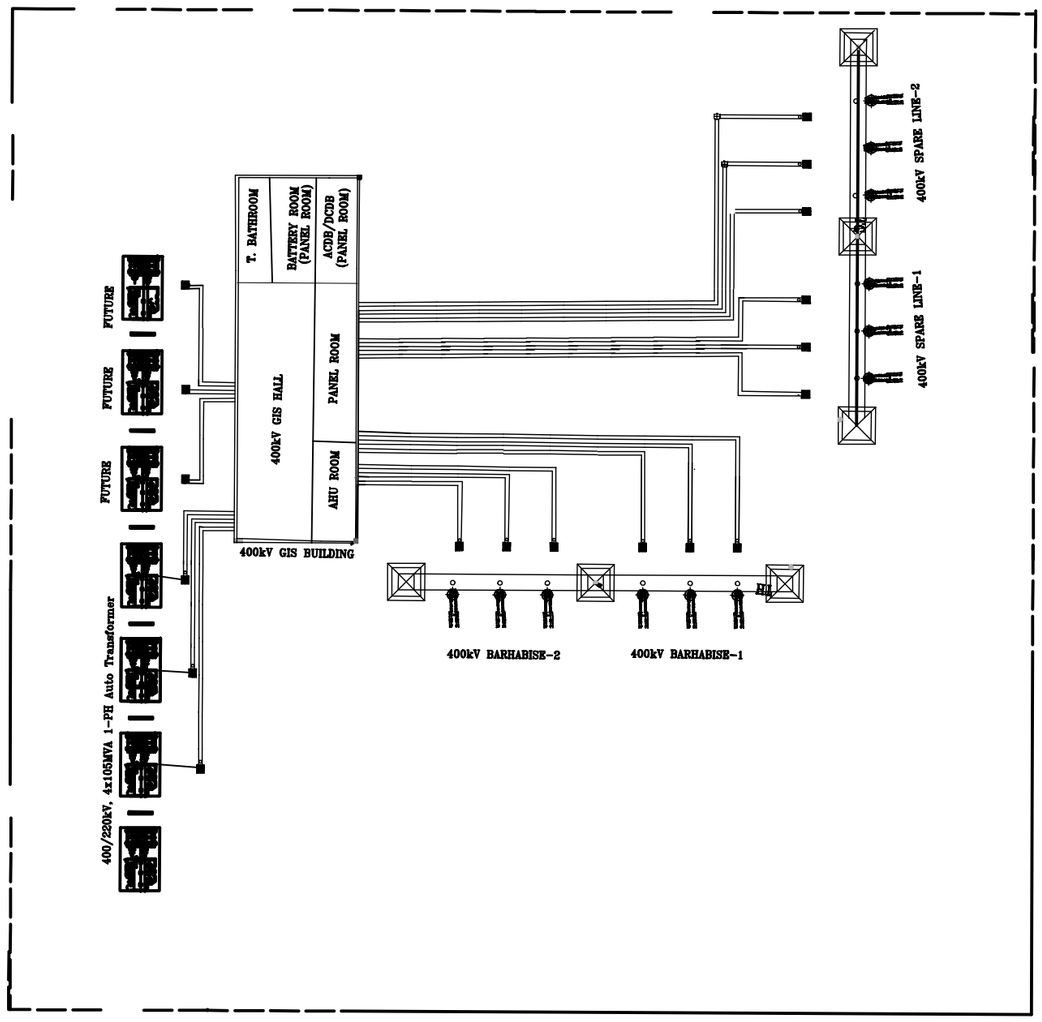
4. DRAWING IS NOT IN SCALE

FOR TENDER PURPOSE ONLY

NEPAL ELECTRICITY AUTHORITY

ELECTRICAL LAYOUT PLAN OF 400kV LAPSIPHEDI SUBSTATION

DRAWING NO.: LAPSIPHEDI-GIS-LAYOUT-0



NOTE:

1. EHV CABLE, 220kv BUS DUCT IS NOT SHOWN,SAME SHALL BE FINALISED DURING DETAIL ENGINEERING AS PER TECHNICAL SPECIFICATIONS

2.CONNECTION OF 220kV SIDE OF 400/220kV TRANSFORMER TO EXISTING 220kV LINE BAYS (WHICH SHALL BE USED AS ICT BAYS) HAS NOT BEEN SHOWN,SAME SHALL BE AS PER PSR AND TECHNICAL SPECIFICATIONS

3. DRAWING IS NOT IN SCALE

FOR TENDER PURPOSE ONLY

NEPAL ELECTRICITY AUTHORITY

ELECTRICAL LAYOUT PLAN OF 400kV LAPSIPHEDI SUBSTATION

DRAWING NO.: LAPSIPHEDI-GIS-LAYOUT-02(B)