



NEPAL ELECTRICITY AUTHORITY

(Government of Nepal Undertaking)

Transmission Directorate

Hetauda-Dhalkebar-Inaruwa 400KV Substation Expansion Project

Kharipati, Bhaktapur
Nepal
Phone: (977) 1 6616932
Email: hdi400kvs@nea.org.np
hdi400kvs@gmail.com

Ref No: 073 / 74- 009

June 9, 2017

To,
All Perspective Bidders,

Subject: Procurement of Plant Design, Supply, Installation, Testing and Commissioning of 400 kV Dhalkebar Substations (ICB No: HDI/ICB/DH/GIS)

Clarification No. 3

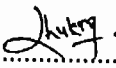
Dear Sirs/ Madams,

In reference to the captioned Tender published on April 13, 2017, Pre-bid meeting dated May 4, 2017 and queries received from perspective Bidders, we hereby issue **Clarification No. 3** pursuant to ITB sub clauses 7.1 of the Bidding Document.

You are requested to acknowledge the receipt of these Clarification.

Encloses: Clarification No. 3 (26 Pages)

Sincerely Yours,


.....

Shukra Raj Devkota
Project Manager



Nepal Electricity Authority
Transmission Directorate

HETAUDA-DHALKEBAR-INARUWA 400KV SUBSTATION EXPANSION PROJECT
Procurement of Plant Design, Supply, and Installation, Testing and Commissioning of 400 kV Dhalkebar Substations (ICB No: HDI/ICB/DH/GIS)
Clarification No. 3

| S.N. | Reference to Bid Document | Equipment/Requirement | Bidder Queries | NEA Clarification |
|---------------------|---------------------------|--|--|--|
| A. Technical | | | | |
| 1 | General | PEB-400kV GIS Hall and attached two storey building : | <p>a) Bidder understands that two storey building attached with 400kV GIS hall will house control room and store rooms as per technical requirements.</p> <p>b) Since it is a two storey building, top roof shall be with puff sandwiched panels and intermittent floors shall be provided with RCC. Please confirm and also request you to elaborate the requirements.</p> <p>c) AHU room has not been shown in GIS Hall drawing. Please provide us the requirement for same.</p> | Please refer the Clarification 1, SN 8 of the Bidding document. |
| 2 | Addendum-2 | <p>19) Batteries & Battery Chargers</p> <p>At presently there were two sets of 600 AH, 220 V and two sets of 600 AH, 48 V battery with Battery Charger installed at battery room of existing control room building. Two sets 200 AH, 220 V and two sets 48 AH, 220 V battery is in the present scope of works and accordingly the set point of existing battery charger shall be changed to 800AH. The necessary extension of DCDB is also in the present scope of work.</p> | <p>Bidder understands that "two sets 48Ah, 220V battery is a typographical error".</p> <p>Bidder requests NEA to revise and confirm the actual requirement for both 220V and 48V battery.</p> | <p>This is typographical error. Bidders are requested to read as 200 AH, 48 V Battery instead written in the document.</p> <p>Further, if the bidder unable to meet the criteria stated in the bidding document shall supplied two sets of 200 AH, 220 V and two sets of 200 AH, 48 V battery with Battery Charger and done necessary augmentation of the system and necessary extension of DCDB to complete the scope of works under the present scope of works. Hence, bidders are requested to quote their price accordingly.</p> |

Handwritten signature

| S.N. | Reference to Bid Document | Equipment/Requirement | Bidder Queries | NEA Clarification |
|------|--|---|--|---|
| 3 | Volume 3 Price Schedule 1 Price Schedule 2 Plant and Mandatory Spare Parts Supplied from Abroad, Plant and Mandatory Spare Parts Supplied from within the Employer's Country | G. 36 kV EQUIPMENT 1) 36kV Circuit Breaker(3-Ph) with support structure 1.1) 1250A, 25kA 2) 72.5kV Isolator (3-Phase) 2.1) 400A Isolator without E/S 3) 36kV Current Transformer (1-Phase) 3.1) 50A/100A (as applicable), 25kA with 120% extended current rating 4) 36kV Voltage Transformer (1-Phase) 4.1) 30kV Surge Arrestors (1-Phase) | 36kV equipment are listed in price schedule 1 and 2, but not mentioned in the scope of work or SLD. Bidder requests to amend the scope of work and SLD. | 36 kV Equipment are used for the connection of 630 KVA LT transformer from tertiary of 315 MVA auto transformers. Bidders shall access the requirement of the works and quote their price accordingly. Also, Please refer the SN 3 & 47, Clarification No. 2 of the Bidding document. |
| 4 | Volume 2 of 3 Chapter 1 Project Specific Requirement | Dimension and color of C&R panels at all the existing switchyards shall match with existing panels | Bidder requests NEA to clarify the color code of existing control and relay panels | The Color of the existing control and relay panels are same as given in clause 12.3 PAINTING, Chapter 2-GTR, Section-6 of Bidding Document. |
| 5 | General | | Bidder understands that control and relay panels for 33kV and 220kV ICT bays will be installed in existing 220kV control room and there is sufficient space available for installation. Please confirm. | Control and relay panels for 220 kV ICT shall be installed at existing switchyard panel room and 33 kV at existing control room and same shall be finalized during detail engineering. |
| 6 | Clarification 2, S.N. 98 | | As per clause 25, Relay test kit is required. Bidder requests technical specifications of relay test kit. | Please refer Clause No 25. RELAY TEST KIT, Chapter 17 –Control and Relay Panels of bidding documents. |
| 7 | Volume 2 of 3 Chapter 13- Battery | | The bidder understands that battery discharge panel is not required for the project. Water load can be used for discharging. Please confirm. | Please refer Chapter 13- Battery of Bidding Document. |
| 8 | Volume 3 of 3 Price Schedule 1; Price Schedule 2) LT Switchgear | a) 400V Main switchboard Augmentation works as per technical Specification: 1 Set b) 400V ACDB: 1 Set c) 400V MLDB: 1 Set d) 400V Emergency LDB: 1 Set e) 220V DCDB: 1 Sets f) 48/50V DCDB Extension: 1 Set | The bidder understands that "set" implies "unit/nos." for the stated line items. | Set implies the required units or numbers to complete the job as per technical specification. |



| S.N. | Reference to Bid Document | Equipment/Requirement | Bidder Queries | NEA Clarification |
|------|--|---|---|--|
| 9 | <p>Volume 3 of 3</p> <p>Volume 2 of 3 Price Schedule 1;</p> <p>Price Schedule 2;</p> <p>Annexure 1W) MANDATORY SPARES</p> <p>Mandatory Spares at 400KV GIS Substation at Dhalkebar</p> | <p>7.B Line Protection Panel Equipment spare</p> <p>1) Main-1 Numerical distance relay (excluding external trip relays) with software and cable for front panel communication to PC: 1 Set</p> <p>2) Main-2 Numerical distance relay (excluding external trip relays) with software and cable for front panel communication to PC: 1 Set</p> <p>3) Disturbance recorder comprising of evaluation & acquisition units with software (if stand alone) : 1 Set</p> <p>4) Distance to fault locator including mutual compensation units (if stand alone) : 1 Set</p> <p>5) Over voltage protection relays with timers (Stage-I & Stage-II) (if stand alone) : 1 Set</p> <p>7.C Transformer Protection Panel</p> <p>3) Back up protection relay with 3 O/C and E/F element and associated software in case of numerical relay: 1 Set</p> <p>4) Over fluxing relay (if stand alone) : 1 Set</p> <p>5) CVT fuse failure relay (if applicable) : 1 Set</p> <p>6) Over load relay with timer (if applicable) : 1 Set</p> <p>7.E Common Spares</p> <p>1) Power supply module for Bus Bar Protection : 1 Set</p> | <p>The bidder understands that "set" implies "unit/nos." for the stated line items.</p> | <p>Set implies the required units or numbers to complete the job as per technical specification.</p> |
| 10 | <p>Volume 3 of 3</p> <p>Volume 2 of 3 Price Schedule 1;</p> <p>Price Schedule 2;</p> <p>Annexure 1W) MANDATORY SPARES</p> <p>Mandatory Spares at 400KV GIS Substation at Dhalkebar</p> | <p>8.0 Substation Automation system</p> <p>3) Longest optical cable with end terminations : 1 Set</p> | <p>Bidder requests clarification on the cable being considered.</p> | <p>Set implies the required units or numbers to complete the job as per technical specification.</p> |



| S.N. | Reference to Bid Document | Equipment/Requirement | Bidder Queries | NEA Clarification |
|------|--|--|--|---|
| 11 | Volume 3 of 3 Volume 2 of 3 Price Schedule 1; Price Schedule 2; Annexure 1W) MANDATORY SPARES Mandatory Spares at 400KV GIS Substation at Dhalkebar S. | 9.0 Fire Fighting System 9.1.5 Electrical Control Panel: Annunciations printed circuits (solid state annunciations) in Control Panel 1 Set 9.1.6 Strainer 1 Set | The bidder understands that "set" implies "unit/nos." for the stated line items. Please confirm. | Set implies the required units or numbers to complete the job as per technical specification. |
| 12 | Volume 3 of 3 Volume 2 of 3 Price Schedule 1; Price Schedule 2; Annexure 1W) MANDATORY SPARES Mandatory Spares at 400KV GIS Substation at Dhalkebar S. | 10.0 420 kV 80MVAR Bus Reactor 10.3 Local and remote WTI complete unit with sensing devices and contacts 1 Set 10.4 Local and Remote OTI complete unit with contacts and sensing bulbs 1 Set 10.9 Neutral Current Transformer 2 Set 10.10 Breather assembly 2 Set 10.12 Sets of fuses of each type used 3 Set 10.13 Oil pumps with motor & starter 1 Set | The bidder understands that "set" implies "unit/nos." for the stated line items. Please confirm. | Set implies the required units or numbers to complete the job as per technical specification. |
| 13 | Volume 3 of 3 Volume 2 of 3 Price Schedule 1; Price Schedule 2; Annexure 1W) MANDATORY SPARES Mandatory Spares at 400KV GIS Substation at Dhalkebar S. | 12.1 630 KVA Transformer 12.1.2 Oil Temperature Indicator with sensing device 1 Set 12.1.3 Tap Changer Contacts 1 Set 12.1.6 Set of valve (each type) 1 Set | The bidder understands that "set" implies "unit/nos." for the stated line items. Please confirm. | Set implies the required units or numbers to complete the job as per technical specification. |



| S.N. | Reference to Bid Document | Equipment/Requirement | Bidder Queries | NEA Clarification |
|------|--|---|--|--|
| 14 | Volume 3 of 3 Volume 2 of 3 Price Schedule 1; Price Schedule 2; Annexure 1W) MANDATORY SPARES Mandatory Spares at 400KV GIS Substation at Dhalkebar S. | 12.2.72.5kV Equipment 12.2.72.5kV Circuit Breaker 1 No. 12.2.8 72.5kV Isolator 1 No. 12.2.9 72.5kV Current Transformer 1 No. 12.2.10 72.5kV Voltage Transformer 1 No. | The items are listed in Annexure 1 but not available in price schedule. Please confirm the requirement and amend the price schedule. | All the spare parts as mentioned in the Chapter 1 is required. Bidders are requested to quote their rate accordingly. Also, please refer the SN 3 & 47, Clarification No. 2 of the Bidding document. |
| 15 | Volume 3 of 3 Volume 2 of 3 Price Schedule 1; Price Schedule 2; Annexure 1W) MANDATORY SPARES Mandatory Spares at 400KV GIS Substation at Dhalkebar S. | 13.0 LT Switch Gear 13.1 Relays Set 1 13.2 CTs and PTs 1 Set 13.3 Switches/ Push buttons and Meters 1 Set 13.4.ATPN Switches / MCB 1 Set 13.4B MCCB of each rating 1 Set 13.5 LT Breaker Spares : 13.5.2 Aux. Contact sets 2Set 13.5.4 Arc Chutes 2 Set 13.5.5 Moving contacts 1 Set 13.5.6 Arcing contacts (Fixed/Moving) 1 Set 13.5.10 Aux. finger contact 1 Set 13.5.11 Limit Switches 1 Set 13.5.12 Jaw Contacts 1 Set | The bidder understands that "set" implies "unit/nos." for the stated line items. Please confirm. | Set implies the required units or numbers to complete the job as per technical specification. |
| 16 | Volume 3 of 3 Volume 2 of 3 Price Schedule 1; Price Schedule 2; Annexure 1W) MANDATORY SPARES Mandatory Spares at 400KV GIS Substation at Dhalkebar S. | 2 TR Split AC Units 1 LS 15.1 High wall type split A/C System 1 Set | The bidder understands that "set" implies "unit/nos." for the stated line items. Please confirm. | Set implies the required units or numbers to complete the job as per technical specification. |



| S.N. | Reference to Bid Document | Equipment/Requirement | Bidder Queries | NEA Clarification |
|------|--|---|---|---|
| 17 | Volume 3 of 3 Volume 2 of 3 Price Schedule 1; Price Schedule 2; Annexure 1W) MANDATORY SPARES Mandatory Spares at 400KV GIS Substation at Dhalkebar S. | 15 Bus Post Insulators a. 400KV 1 LS | Bidder requests breakup of quantity for spare bus post insulators in nos./unit | Set implies the required unit or number to complete the jobs as per technical specification. |
| 18 | Volume 2 of 3 CHAPTER – 1 PROJECT SPECIFIC REQUIREMENTS (PSR) | | Bidder understands that energy/tariff meters for 400KV and 220KV voltage level can be housed in a single panel. Please confirm or elaborate the requirement. | Shall be finalized during detail engineering |
| 19 | General | | Bidder understands that existing pump house including water tank and associated pumps and accessories are completely functional and any work in the existing fire fighting system is not in scope of work | All are in functional, however necessary integration/augmentation of the existing fire protection works as required is in the scope of contract as per technical specification. |
| 20 | General | | Bidder requests for detailed drawings for existing fire fighting system indicating the distance of nearest available tapping point. | Shall be provided to the successful bidder. |
| 21 | General | | Bidder requests tender layout for fire detection and alarm system. | Shall be provided to the successful bidder. |
| 22 | General | | Bidder understands that inverter will be without any separate battery system. Please confirm | Inverter shall be provided with suitable battery system, same shall be finalized during detail engineering |
| 23 | Volume 2 of 3 Chapter 1: Project Specific Requirement & Chapter 1: Switchyard Erection | 11.0 SPECIFIC REQUIREMENT states fault level of all equipment to be 50kA for 1 sec for 400KV level. while 8.4 DESIGN REQUIREMENTS states 40kA for 1 sec as design fault level for earthing. | Bidder requests to specify the required fault level for 400KV side. | Please refer Addendum No 2, SN 17 of the Bidding Document. |

Shubert


| S.N. | Reference to Bid Document | Equipment/Requirement | Bidder Queries | NEA Clarification |
|------|---|---|--|--|
| 24 | Volume 2 of 3, Volume 3 of 3 Chapter 1 Price Schedule 1 and 2 PROJECT SPECIFIC REQUIREMENTS (PSR) W. Mandatory Spares | 12.2 72.5KV Equipment 12.2.7 72.5KV Circuit Breaker No 1 12.2.8 72.5KV Isolator No 1 12.2.9 72.5KV Current Transformer No 1 12.2.10 72.5KV Voltage Transformer No 1 | Spares for 72.5KV equipment are listed in Chapter 1- Project Specific Requirements but not available in price schedule 1 and 2. Bidder understands that these spares are not required. Please confirm. | All the spare parts as mentioned in the Chapter 1 is required. Bidders are requested to quote their rate accordingly. |
| 25 | Line terminal tower Technical specification | In bidding document, the terminal tower is in this scope. Please indicate which tower is in this scope in the drawing. | Please indicate which tower is in this scope in the drawing. | 400 kV Gantries and 220 kV line bay gantries were existing, however the all 220 kV Gantries, 33 kV and LM required for the connection are under the present scope of the contract. |
| 26 | Road Technical specification | There is no drawing of the road in the tender drawing | Please the owner to provide the road drawings | Bidders shall developed during the detail engineering. |
| 27 | Firefighting pump house & water tank Technical specification | There is no description of the size of the firefighting pump room and the water tank | Please provide the sizes of the firefighting pump room and the water tank or the drawings related. | Shall be provided to the successful bidder. |
| 28 | Fence & gate DHA-GIS-E-LV-1 | There is no layout of the fence and gate in the tender drawing | Please provide the layout of the fence and gate | |
| 29 | Outdoor hydrant and water spray system Technical specification P498 | The tender does not specify the scope and duration of the outdoor fire hydrant, water spray system. Whether it applies only to 400 kv area. Please confirm | Please clarify if the water tank and pump are only applied for 400 kV area, and the duration of the fire protection for the outdoor fire hydrant, water spray system | Outdoor hydrant and water spray system shall be envisaged in the 400 kV yard under the present scope of the contract. |
| 30 | Section 6/ Chapter 3/ page 28 - cl. 9.1.3-d | CT rated extended current rating | Please advise the % rated extended current to be adopted for 420 kV class Current transformers, in the given 120%, 180% & 200 % of rated current. | Please refer the clause no. 9.1.3. Constructional Details, Chapter 3 –GIS Switchgear of Technical Specification of Bidding documents. |
| 31 | Section 6/ Chapter 17/ page 15 - cl. 18.6 | Distance to fault locator (travelling wave type) | Kindly confirm does this "Distance to fault locator" applicable to this bid for the 420KV 6 Nos Incoming/ Outgoing lines ? | Confirmed |
| 32 | Section 6/ Chapter 2/ page 30 - cl. 16.1 | Equipment support structure | Presume the mentioned 14 meter support structure is not applicable to this bid. And for this bid, considers 8.0 meter support structure for 420KV system & 5.9 meter support structure for 245KV system. Kindly confirm. | Shall be finalized during detail engineering |




| S.N. | Reference to Bid Document | Equipment/Requirement | Bidder Queries | NEA Clarification |
|------|--|---|--|--|
| 33 | Section 6/ Chapter 1/ page 10 - cl. 19 | 220V, 48V DCDBs for 400kV GIS | <p>From the bid NEA layout drawings, noted an approximate distance of 325 meters between the existing 220V & 48V DCDBs in the control building and to the new DCDBs at 400kV GIS control building.</p> <p>To limit the voltage drop while transferring DC power for a distance of 325 m & for a considerable amount of power of 400kV GIS substation, requires a large number of power cable runs to lay between existing control building to 400kV GIS control building.</p> <p>To avoid this large power cabling, request NEA to advice new 220V, 48V battery chargers and battery bank along with its rating, configuration details to cater 400kV GIS substation. Kindly advise.</p> | <p>Please refer the Clarification 1, SN 31, Clarification 2, SN 37 and subsequent clarification of the Bidding document .</p> |
| 34 | Section 6/Chapter 6 / page 1 - Cl 1.1.1 | Reactor ONAN /OFAF cooling | <p>Kindly clarify, does this reactor is of ONAN type cooling or OFAF type cooling?? If OFAF cooling is required, please advise No. of cooler requirements such as 4x33% or 5x25% or 6 x 20% etc.</p> | <p>ONAN- One 100% Bank OFAF- Adequate No. of Coolers with one cooler as standby</p> |
| 35 | Section 6/ chapter 4 & Section 6/Chapter 2 / page 44 | Seismic withstand test | <p>Presumed seismic withstand test requirement for Outdoor installed CVT & Surge arresters alone as given in outdoor switchgear specification chapter 4 of section 6. Noted the test procedure requirement at chapter 2.</p> <p>For the support structures, in line of the test report , proposes substantiating calculation to validate seismic withstand ability. Kindly confirm.</p> | <p>In case of outdoor equipment support structures, substantiating calculation to validate seismic withstand in line with test report & technical specification of bidding document shall be accepted.</p> |
| 36 | Addendum No 2, S.N.2 | CTs at 400kV GIS Auto Transformer bays, added at addendum No.2 S.No.2 | <p>Given number of CTs and CT ratio are not matching with following a. Rev 1 DHA-GIS-SLD-1 b. CT AT13, AT23 & AT33 at Addendum No 2 / Annexure-1 Kindly clarify the CT requirement.</p> | <p>Please refer the Clarification given in the SN. 24, Clarification No. 2 of Bidding Document.</p> |

Handwritten signature

| S.N. | Reference to Bid Document | Equipment/Requirement | Bidder Queries | NEA Clarification |
|------|---|--|--|---|
| 37 | Addendum No 2, Annexure-I | CT-AT12, AT22 & AT-32 located at 400KV GIS Tie breaker of Auto Transformer bay | Referred CT - technical requirements are not found at addendum No 2, Annexure-I. Kindly provide the CT requirement detail. | Please refer the Clarification given in the SN. 24, Clarification No. 2 of Bidding Document. |
| 38 | Addendum No 2, S.N 3 | CTs at 400KV GIS - shunt reactor Tie breaker circuit | Given CT (i.e., CT Q2) technical requirements are not matching with Addendum No-2 Annexure -I CT Q2. Kindly confirm the CT requirements. | Please refer the Clarification given in the SN. 24, Clarification No. 2 of Bidding Document. |
| 39 | Section 6 / chapter 17 / page 23 Cl 16 | TEE differential protection relays | Requirement of this relay protection and associated CTs are not found in the Addendum No 2 Annexure -I. Kindly clarify applicability of this TEE differential protection and provide respective CT requirements. | Please refer the Clarification given in the SN. 24, Clarification No. 2 of Bidding Document. |
| 40 | Addendum No 2, Annexure-I | CT-*ATN, CT-*R12N, R22N | Requirement of these CTs are not matching with Shunt reactor neutral bushing CTs given in Rev 1. DHA-GIS-SLD-1 and at page -5 of chapter 06 of section 06 technical specification. Kindly confirm the CT requirements. | Please refer the Clarification given in the SN. 24, Clarification No. 2 of Bidding Document. |
| 41 | General | | We presume that the pre engineering building members are made of MS steel and shall be painted with one coat of steel primer and two coats of synthetic enamel paint after erection. Please confirm | Only purllins and side runners in Pre-engineering building are galvanized and rests shall be painted as per chapter 15 -Structure of the bidding documents. |
| 42 | NEA Bid clarification No .1 / S.N. 49 (a) | 420KV GIS bus current rating shall be 6000A. | Please note, requested 6000A bus current rating for 420KV GIS system is not in the GIS manufacturer's standard. However 550KV GIS is available with 6000A busbar current rating. Hence request NEA to advise, is 550KV 6000A GIS to consider instead of 420KV GIS ? | Provision of the bidding document remains unchanged. |
| 43 | Section 6 / Chapter 3/ page 46 / Cl 26 | Testing and maintenance equipment | In case of listed in the price schedule, Testing and maintenance equipments are required to supply, as mentioned in the specification. However the requirement of these testing and maintenance equipment are not found in the Bid Price Schedule. Please identify the required Testing & maintenance equipment in the bid price schedule. | Testing and maintenance equipments are included in the Item No W, MANDATORY SPARES, SN (1) Gas Insulated Switchgear along with spare parts. Bidders are requested to quote their price accordingly. |



| S.N. | Reference to Bid Document | Equipment/Requirement | Bidder Queries | NEA Clarification |
|------|---|--|---|--|
| 44 | Section 6 / Chapter 3 / Page 29 / CI 9.2.1 | 420kV GIS - VT rating, ratio, accuracy class, connection | Specification makes reference to annexure -4 & Table 4A and Table 4B for VT rating, ratio, accuracy class & connection. This referred annexure and Tables are not found in the bid specification. Hence presume to use 420KV GIS Bus VT details as given in the bid single line diagram, "400KV GIS Dhalkebar Substation DHA-GIS-SLD-1". Kindly confirm. | Please refer TABLE - I/A REQUIREMENTS OF 420 KV CAPACITIVE VOLTAGE TRANSFORMERS of Chapter 4- Outdoor Switchgear of Bidding documents. |
| 45 | Section 6 / Chapter 3 / Page 30 / CI 9.2.5(d) | 420KV GIS - VT secondary protection | In the specification - MCB , Fuse both type of protection requested for VT secondary. Kindly confirm the requirement either MCB or Fuse. | MCB is also acceptable in line with technical specification. |
| 46 | Section 6 / Chapter 3 / Page 30 / CI 9.2.5(f) | 420KV GIS - VT accuracy class | Specification requires 0.2 S accuracy class on VT secondary III which is not consistent with details given in the bid single line diagram "400KV GIS Dhalkebar Substation DHA-GIS-SLD-1". Based on SLD, presume winding 1 with 0.2 S accuracy class maintained throughout the entire burden range up to 75 VA. This accuracy class is considered only for winding 1. Kindly confirm. | Please refer TABLE - I/A REQUIREMENTS OF 420 KV CAPACITIVE VOLTAGE TRANSFORMERS of Chapter 4- Outdoor Switchgear of Bidding documents. |
| 47 | Section 6 / Chapter 3 / Page 32 / CI 11.1 | 420KV GIS - Outdoor bushing creepage distance. | Noted creepage distance requirement as minimum 25mm/KV and 31mm/kV for highly polluted area. Presume to consider 25mm/kV for this bid GIS outdoor bushing in line with the requirement given specification section 6, chapter 14, page 30 cl 7.3 pollution level as Heavy (III) for bus post insulator. Kindly confirm. | Confirmed |



| S.N. | Reference to Bid Document | Equipment/Requirement | Bidder Queries | NEA Clarification |
|------|---|---------------------------------|--|---|
| 48 | Section 6 / Chapter 11 / Page 35 / Cl 9.03.06 | Maintenance for Fire detectors | Specification requires "Fire detectors shall be guaranteed to function properly without any maintenance work for a period of not less than ten (10) years." But NFPA 72 standard recommends periodical inspection and maintenance of fire detectors. Hence presumed the detectors required for this bid is subject to periodical inspection and maintenance. Kindly confirm. | Provision of the bidding document remains unchanged. |
| 49 | Section 6 / Chapter 5 / Page 33 / Cl 6 | % Impedance of Auto Transformer | Presumed, 12.5% impedance given in the specification is against HV (400kV) and LV (220kV) at principal tap as confirm. Kindly Also advise the impedance requirement between HV & IV, IV & LV. | Please refer clause No 6. Technical Parameters, Chapter 5 –Auto Transformer of the bidding documents. |
| 50 | General | | Please clarify if travelling wave type is required or not. If yes, please confirm only 6 nos 400kV lines shall be considered in the scope. And please revise the price schedule accordingly. | Please refer the Clarification given in the SN 31 and requested quote the price accordingly. |
| 51 | General | | As for LT switchgear, the manufacturer can not find 400V Emergency LDB and 220V DCDB on the drawings, also, there is no TDS for them . | Bidders shall access the exact requirement in line with technical specification and quote the price accordingly, same shall be finalized during detail engineering. |
| 52 | General | | Bidder understands that in case of any faulty equipment in existing 220kV bays, the same will be designed, supplied, installed, tested and commissioned by NEA and will not be part of bidder's scope of work. Please confirm. | Confirmed |
| 53 | General | | Please provide the location of Transmission line corridor for the substation. | Please refer the Chapter 1-PSR of the technical specification. |

Jubey

| S.N. | Reference to Bid Document | Equipment/Requirement | Bidder Queries | NEA Clarification |
|----------------------|--|---|---|---|
| B. Commercial | | | | |
| 54 | 2.4.2 (a) – Specific Experience of Section 3-Evaluation and Qualification criteria & SI No. 116 of Clarification 1 | Participation as contractor, management contractor, or subcontractor, in at least two (2) contracts within the last 10 years, each with a value of at least 28 MUSD that have been successfully or are substantially completed..... | After going through Clarification 1, we under stood the clause as under. We assume that, credential of 400 KV or above voltage class Air insulated substation (AIS) and Gas Insulated substation (GIS) both types of substation contract are acceptable to NEA . | Your understanding is correct. |
| 55 | General | | We have not found the format for Joint Venture agreement in tender document for subject work. Request you to provide the format of JV agreement at earliest. | Attached as an Annexure to this Clarification. Bidders are requested to refer accordingly. |
| 56 | ITB 21.1 | The Bidder shall furnish a bid security in the amount of: USD. 970,000 or an equivalent amount in Nepalese Currency. | We assume that NEA shall accept the Bid security in the currency of INR of equivalent amount of USD 970,000. Please confirm. | Bid security must be either USD or NRs. as specified in the Bidding Document. |
| 57 | GCC – 27.9 / Defect Liability | | Definition of "Gross negligence" and "willful misconduct" shall be included as per following: "Gross Negligence" means tortious acts or omissions by Contractor's Managerial or Supervisory Personnel, (but not a subcontractor, engineer, or inspector) 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. "Willful Misconduct" means, on the part of a Party's Managerial or Senior Supervisory Personnel, (but not a subcontractor, engineer, or inspector)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. | Provision of the bidding document remains unchanged. |

| S.N. | Reference to Bid Document | Equipment/Requirement | Bidder Queries | NEA Clarification |
|------|--|--|---|--|
| 58 | GCC 27 / Defect Liability | | Please add following: "This Clause provides the exclusive remedies for all claims based on failure of or defect in Products or Services, regardless of when the failure or defect arises, and whether a claim, however described, is based on contract, warranty, indemnity, tort/extra-contractual liability (including negligence), strict liability or otherwise. The warranties provided in this Clause are exclusive and are in lieu of all other warranties, conditions and guarantees whether written, oral, implied or statutory." | Provision of the bidding document remains unchanged. |
| 59 | GCC 33 / Loss of or Damage to Property, Accident or Injury to Workers; Indemnification | Subject to GCC Sub clause 33.3, the Contractor shall indemnify and hold harmless the Employer and its employees and officers from and against any and all third party suits, actions, or administrative proceedings, claims, ... or injury of any person or loss of or damage to any tangible property ... | Please amend as per highlights. | Provision of the bidding document remains unchanged. |
| 60 | GCC 45 / Disputes and Arbitration | 45.3: Obtaining Dispute Board's Decision 45.5: Unless settled amicably, any dispute in respect of which the Dispute Board's decision (if any) has not become final and binding shall be finally settled by international arbitration. | Please confirm if resolution by Arbitration under the Rules of Arbitration of the International Chamber of Commerce ("ICC") is acceptable. | Provision of the bidding document remains unchanged. |
| 61 | SCC 5 / Law and Language | The Contract shall be interpreted in accordance with the laws of: Nepal | The United Nations Convention on Contracts for the International Sale of Goods shall apply. | Provision of the bidding document remains unchanged. |



Handwritten signature

ANNEXURE TO CLARIFICATION NO. 3

BIDDING FORMS FOR JOINT VENTURES



FORM: POWER OF ATTORNEY FOR JOINT VENTURE

(On Non-judicial Stamp Paper of Appropriate value, if required as per laws of the country of the bidder, to be purchased in the Name of Joint Venture)

KNOW ALL MEN BY THESE PRESENTS THAT WE , the Partners whose details are given hereunder have formed a Joint Venture under the laws of(*)/intend to form a Joint Venture(*) [(*) delete whichever is not applicable] and having our Registered Office(s)/Head Office(s) at (hereinafter called the 'Joint Venture' which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators and assigns) acting through M/s being the Partner in-charge do hereby constitute, nominate and appoint M/s..... a Company incorporated under the laws of and having its Registered/Head Office at as our duly constituted lawful Attorney (hereinafter called "Attorney" or "Authorised Representative" or "Partner In-charge") to exercise all or any of the powers for and on behalf of the Joint Venture in regard to IFB No..... the bids for which have been invited by Nepal Electricity Authority, Hetauda Dhalkebar Inaruwa 400 kV Substation Expansion Project (hereinafter called the 'Employer') to undertake the following acts:

- i) To sign and submit proposal and participate in the aforesaid Bid Specification of the Employer on behalf of the "Joint Venture".
- ii) To negotiate with the Employer the terms and conditions for award of the Contract pursuant to the aforesaid Bid and to sign the Contract with the Employer for and on behalf of the "Joint Venture".
- iii) To do any other act or submit any document related to the above.
- iv) To receive, accept and execute the Contract for and on behalf of the "Joint Venture".

For the above purpose, the person(s) authorized by the Partner In-charge shall be the person(s) authorized to act on behalf of the "Joint Venture" as per the Power of Attorney given to him/her/them by the Partner In-Charge,

It is clearly understood that all the partners of the joint venture shall be liable jointly and severally for the execution of the Contract in accordance with the Contract terms and the Partner In-charge (Lead Partner) shall ensure performance of the Contract(s) and if one or



more Partner fail to perform their respective portions of the Contract(s), the same shall be deemed to be a default by all the Partners.

It is expressly understood that this Power of Attorney shall remain valid binding and irrevocable till completion of the Defect Liability Period in terms of the Contract.

The Joint Venture hereby agrees and undertakes to ratify and confirm all the whatsoever the said Attorney/Authorised Representatives/Partner in-charge quotes in the bid, negotiates and signs the Contract with the Employer and/or proposes to act on behalf of the Joint Venture by virtue of this Power of Attorney and the same shall bind the Joint Venture as if done by itself.

IN WITNESS THEREOF the Partners Constituting the Joint Venture as aforesaid have executed these presents on this..... day of under the Common Seal(s) of their Companies.

For and on behalf of the
Partners of Joint Venture

.....
.....

The Common Seal of the above Partners of the Joint Venture:

The Common Seal has been affixed there unto in the presence of:

WITNESS

1. Signature.....

Name

Designation

Occupation

2. Signature.....

Name

Designation

Occupation

Note: Bidder may use their own proforma for furnishing the Power of Attorney in support of person signing the in case of sole bidder.



FORM: FOR UNDERTAKING BY THE JOINT VENTURE PARTNERS

(On Non-Judicial Stamp Paper of Appropriate Value, if required as per laws of the country of the bidder, to be purchased in the Name of Joint Venture)

THIS JOINT DEED OF UNDERTAKING executed on this _____ day of _____ Two Thousand and _____ by _____ a company incorporated under the laws of _____ and having its Registered Office at _____ (hereinafter called the "Party No.1" which expression shall include its successors, executors and permitted assigns) and M/s _____ a company incorporated under the laws of _____ and having its Registered Office at _____ (Hereinafter called the "Party No.2" which expression shall include its successors, executors and permitted assigns) and M/s..... a Company incorporated under the laws of _____ and having its Registered Office at _____ (hereinafter called the "Party No.3" which expression shall include its successors, executors and permitted assigns) for the purpose of making a bid and entering into a contract [hereinafter called the "Contract" [in case of award]] against the IFB No _____ for _____ (.) _____ associated with Nepal Electricity Authority, Hetauda Dhalkebar Inaruwa 400 kV Substation Expansion Project(hereinafter called the "Employer").

WHEREAS the Party No.1, Party No.2 and Party No.3 have entered into an Agreement dated _____

AND WHEREAS the Employer invited bids as per the above mentioned Specification for the design, manufacture, Supply of Equipment Materials stipulated in the bidding documents under _____ (.) _____ associated with _____.

AND WHEREAS Clause 4.1, Section-ITB and 'Qualification Requirement of the Bidder', Section-Evaluation and Qualification Criteria forming part of the bidding documents, inter-alia, stipulates that an Undertaking of two or more qualified partners, meeting the requirements of 'Qualification Requirement of the Bidder', Section-Evaluation and Qualification Criteria, as applicable may bid, provided, the Joint Venture fulfills all other requirements under Clause 4.1 (a) and (b) of ITB and 'Qualification Requirement of the Bidder', Section-Evaluation and Qualification Criteria and in such a case, the Letter of Bid (Bid

Handwritten signature


Form) shall be signed by the Partner –In Charge so as to legally bind all the Partners of the Joint Venture, who will be jointly and severally liable to perform the Contract and all obligations hereunder.

The above clause further states that this Undertaking shall be attached to the bid and the Contract performance guarantee will be as per the format enclosed with the bidding document without any restrictions or liability for either party.

AND WHEREAS the bid is being submitted to the Employer vide proposal No.....dated..... by Party No.1 based on this Undertaking between all the parties; under these presents and the bid in accordance with the requirements of Clause 4.1, Section-ITB and 'Qualification Requirement of the Bidder', Section-Evaluation and Qualification Criteria, has been signed by all the parties.

NOW THIS UNDERTAKING WITNESSETH AS UNDER:

In consideration of the above premises and agreements all the parties of this Deed of Undertaking do hereby declare and undertake:

1. In requirement of the award of the Contract by the Employer to the Joint Venture Partners, we, the Parties do hereby undertake that M/s..... the Party No.1, shall act as Lead Partner and further declare and confirm that we the parties to the Joint Venture shall jointly and severally be bound unto the Employer for the successful performance of the Contract and shall be fully responsible for the design, manufacture, Supply, and successful performance of the equipment in accordance with the Contract:
2. In case of any breach or default of the said Contract by any of the parties to the Joint Venture, the party (s) does hereby undertake to be fully responsible for the successful performance of the Contract and to carry out all the obligations and responsibilities under the Contract in accordance with the requirements of the Contract.
3. Further, if the Employer suffers any loss or damage on account of any breach in the Contract or any shortfall in the performance of the equipment in meeting the



- performances guaranteed as per the specification in terms of the Contract, the Party(s) of these presents undertake to promptly make good such loss or damages caused to the Employer, on its demand without any demur. It shall not be necessary or obligatory for the Employer to proceed against Lead Partner to these presents before proceeding against or dealing with the other Party(s), the Employer can proceed against any of the parties who shall be jointly and severally liable for the performance and all other liabilities/obligations under the Contract to the Employer.
4. The financial liability of the Parties of this Deed of Undertaking to the Employer, with respect to any of the claims rising out of the performance or non-performance of the obligations set forth in this Deed of Undertaking, read in conjunction with the relevant conditions of the Contract shall, however not be limited in any way so as to restrict or limit the liabilities or obligations of any of the Parties of this Deed of Undertaking.
 5. It is expressly understood and agreed between the Parties to this Undertaking that the responsibilities and obligations of each of the Parties shall be as delineated in **Appendix – I (to be suitably appended by the Parties along with this undertaking in its bid)**. It is further undertaken by the parties that the above sharing of responsibilities and obligations shall not in any way be a limitation of joint and several responsibilities of the Parties under the Contract.
 6. It is also understood that this Undertaking is provided for the purposes of undertaking joint and several liabilities of the partners to the Joint Venture for submission of the bid and performance of the Contract if awarded and that this Undertaking shall not be deemed to give rise to any additional liabilities or obligations, in any manner or any law, on any of the Parties to this Undertaking or on the Joint Venture, other than the express provisions of the Contract.
 7. This Undertaking shall be construed and interpreted in accordance with the provisions of the Contract.
 8. In case of an award of a Contract, we the parties to this Deed of Undertaking do hereby agree that we shall be jointly and severally responsible for furnishing a



Contract performance security from a bank in favour of the Employer in the currency/currencies of the Contract.

9. It is further agreed that this Deed of Undertaking shall be irrevocable and shall form an integral part of the bid and shall continue to be enforceable till the Employer discharges the same or upon the completion of the Contract in accordance with its provisions, whichever is earlier. It shall be effective from the date first mentioned above for all purposes and intents.

IN WITNESS WHEREOF, the Parties to this Deed of Undertaking have through their authorised representatives executed these presents and affixed Common Seals of their companies, on the day, month and year first mentioned above.

Common Seal of _____ (For party No 1)

Has been affixed in our presence pursuant to Board of Director's Resolution

Dated _____

Name _____

Designation _____

for and on behalf of M/s _____

Signature _____

(Signature of the authorized representative)

WITNESS:

I.

II.

Common Seal of _____

(For party No 2)



Has been affixed in our presence pursuant to Board of Director's Resolution

Dated _____

Name _____

Designation _____

for and on behalf of M/s _____

Signature _____

(Signature of the authorized representative)

WITNESS:

I.

II.

Common Seal of _____

(For party No 3)

Has been affixed in our presence pursuant to Board of Director's Resolution

Dated _____

Name _____

Designation _____

for and on behalf of M/s _____

Signature _____

(Signature of the authorized representative)

WITNESS:

I.

II.



FORM: LETTER OF INTENT BY JV PARTNERS TO ENTER INTO JV AGREEMENT

THIS LETTER OF INTENT signed on this _____ day of _____ Two Thousand and _____ by _____ a company incorporated under the laws of _____ and having its Registered Office at _____ (hereinafter called the "Party No.1" which expression shall include its successors, executors and permitted assigns) and M/s _____ a company incorporated under the laws of _____ and having its Registered Office at _____ (hereinafter called the "Party No.2" which expression shall include its successors, executors and permitted assigns) and M/s _____ a Company incorporated under the laws of _____ and having its Registered Office at _____ (hereinafter called the "Party No.3" which expression shall include its successors, executors and permitted assigns) for the purpose of making a bid and entering into a contract [hereinafter called the "Contract" (in case of award)] against the IFB No _____ for _____ (.) _____ associated with _____ of Nepal Electricity Authority, Hetauda Dhalkebar Inaruwa 400 kV Substation Expansion Project(hereinafter called the "Employer").

WHEREAS the Party No.1, Party No.2 and Party No.3 intend to enter into a Joint Venture Agreement

AND WHEREAS the Employer invited bids as per the above mentioned Specification for the design, manufacture, Supply of Equipment Materials stipulated in the bidding documents under _____ (.) _____ associated with _____.

AND WHEREAS Clause 4.1, Section-ITB and 'Qualification Requirement of the Bidder', Section-Evaluation and Qualification Criteria forming part of the bidding documents, inter-alia, stipulates that two or more qualified partners, meeting the requirements of 'Qualification Requirement of the Bidder', Section-Evaluation and Qualification Criteria, as applicable may bid, provided, they submit a Letter of Intent to enter into Joint Venture Agreement and the Joint Venture Partners fulfil all other requirements under Clause 4.1 (a) and (b) of ITB and 'Qualification Requirement of the Bidder', Section-Evaluation and Qualification Criteria and in such a case, the Letter of Bid (Bid Form) shall be signed by all the proposed partners so as to legally bind all the Partners of the Joint Venture, who will be jointly and severally liable to perform the Contract by entering into Joint Venture Agreement



as per proforma specified in this Section IV. Bidding Forms of the Bidding Documents which will be legally binding on all partners and all obligations hereunder.

The above clause further states that this Letter of Intent shall be attached to the bid and the Contract performance guarantee will be as per the format enclosed with the bidding document without any restrictions or liability for either party.

AND WHEREAS the bid is being submitted to the Employer vide proposal No _____ dated _____ by Party No.1 based on this Letter of Intent between all the parties; under these presents and the bid in accordance with the requirements of Clause 4.1, Section-ITB and 'Qualification Requirement of the Bidder', Section-Evaluation and Qualification Criteria, has been signed by all the parties.

NOW THIS UNDERTAKING WITNESSETH AS UNDER:

In consideration of the above premises and agreements all the parties of this Letter of Intent do hereby declare and undertake:

1. In requirement of the award of the Contract by the Employer to the Joint Venture Partners, we, the Parties do hereby undertake that M/s..... the Party No.1, shall act as Lead Partner and further declare and confirm that we the parties to the Joint Venture shall jointly and severally be bound unto the Employer for the successful performance of the Contract and shall be fully responsible for the design, manufacture, Supply, and successful performance of the equipment in accordance with the Contract for which we shall enter into Joint Venture Agreement as per proforma specified in this Section IV. Bidding Forms of the Bidding Documents which will be legally binding on all partners:
2. If the Contract is awarded to Joint Venture then in case of any breach or default of the said Contract by any of the parties to the Joint Venture, the party(s) will be fully responsible for the successful performance of the Contract and to carry out all the obligations and responsibilities under the Contract in accordance with the requirements of the Contract.



3. Further, if the Employer suffers any loss or damage on account of any breach in the Contract or any shortfall in the performance of the equipment in meeting the performances guaranteed as per the specification in terms of the Contract, the Party(s) of these presents will promptly make good such loss or damages caused to the Employer, on its demand without any demur. It shall not be necessary or obligatory for the Employer to proceed against Lead Partner to these presents before proceeding against or dealing with the other Party(s), the Employer can proceed against any of the parties who shall be jointly and severally liable for the performance and all other liabilities/obligations under the Contract to the Employer.
4. The financial liability of the Parties of the Deed of Undertaking to the Employer in the event of award of Contract on the Joint Venture, with respect to any of the claims rising out of the performance or non-performance of the obligations set forth in the Deed of Undertaking, read in conjunction with the relevant conditions of the Contract shall, however not be limited in any way so as to restrict or limit the liabilities or obligations of any of the Parties of the Deed of Undertaking.
5. It is expressly understood and agreed between the Parties to this Letter of Intent that the responsibilities and obligations of each of the Parties shall be as delineated in **Appendix – I (to be suitably appended by the Parties along with this Letter of Intent in its bid)**. It is further undertaken by the parties that the above sharing of responsibilities and obligations shall not in any way be a limitation of joint and several responsibilities of the Parties under the Contract in the event of award on Joint Venture.
6. It is also understood that this Letter of Intent is provided for the purposes of undertaking joint and several liabilities of the partners to the Joint Venture for submission of the bid and performance of the Contract if awarded and that this Letter of Intent shall not be deemed to give rise to any additional liabilities or obligations, in any manner or any law, on any of the Parties to this Letter of Intent or on the Joint Venture, other than the express provisions of the Contract.
7. This Letter of Intent shall be construed and interpreted in accordance with the provisions of the Contract.



8. In case of an award of a Contract, we the parties to this Letter of Intent do hereby agree that we shall enter into Joint Venture Agreement as per proforma specified in this Section IV. Bidding Forms of the Bidding Documents which will be legally binding on all partners and we shall be jointly and severally responsible for furnishing a Contract performance security from a bank in favour of the Employer in the currency/currencies of the Contract.
9. It is further agreed that this Letter of Intent shall be irrevocable and shall form an integral part of the bid. It shall be effective from the date first mentioned above for all purposes and intents.

IN WITNESS WHEREOF, the Parties to this Letter of Intent have through their authorised representatives executed these presents and affixed Common Seals of their companies, on the day, month and year first mentioned above.

Common Seal of _____ (For party No 1)

Has been affixed in\our presence pursuant to Board of Director's Resolution

Dated _____

Name _____

Designation _____

for and on behalf of M/s _____

Signature _____

(Signature of the authorized representative)

WITNESS:

I.

II.

Common Seal of _____ (For party No 2)

Has been affixed in\our presence pursuant to Board of Director's Resolution

Dated _____



Name _____

Designation _____

for and on behalf of M/s _____

Signature _____

(Signature of the authorized representative)

WITNESS:

I.

II.

Common Seal of _____

(For party No 3)

Has been affixed in our presence pursuant to Board of Director's Resolution

Dated _____

Name _____

Designation _____

for and on behalf of M/s _____

Signature _____

(Signature of the authorized representative)

WITNESS:

I.

II.

