



**NEPAL ELECTRICITY AUTHORITY**  
**Medium Voltage Grid Development Department, Transmission Directorate**

**Urban Transmission and Distribution System Improvement Project**  
JICA Loan No. NE-P13:

**Package-1: Design Build Plant and Works for Construction of Birauta 132/11kV Substation and  
Associated Transmission and Distribution Lines in Pokhara**  
(Bid Identification No.: ICB/NEA/UTDSIP/82/83-01)

**Addendum No. 1**

Date: December 5, 2025

The following revisions have been made to the Bidding Documents and shall form an integral part thereof.

*In case of any discrepancy between the figures, dimensions, or specifications stated in the original Bidding Documents (including drawings and technical specifications) and those clarified or corrected in this Clarification, the provisions of this Clarification shall prevail. The Contractor shall apply these corrected values consistently across all related drawings, schedules, and specifications without requiring a separate Addendum for each instance.*

**1. VOLUME-I OF THE BIDDING DOCUMENTS**

1.1 Section II: Bid Data Sheet

(1) BDS Sub-Clause 4.7

ITB 4.7 is added, as follows:

“4.7 Bid Submission Eligibility

Only Bidders who have officially acquired the Bidding Document in accordance with ITB 6.3, including completion of the payment process, shall be eligible to submit a Bid.

Bidders who have not followed the prescribed procedure for acquiring the Bidding Document shall be deemed ineligible.

In the case of a JV submission, if any of the JV partners acquires the Bidding Document in accordance with ITB 6.3, the JV shall be eligible to submit a Bid.”

(2) BDS Sub-Clause 7.1

The words of “Response to any request for clarification, if any.....Web Page..... prequalification” in the last two paragraphs shall be replaced by “Response to any request for clarification, if any, will be replied by the Employer by an official letter addressed to the Bidders who purchased the Bid Document as an eligible bidder.

(3) BDS Sub-Clause 19.2(d)

The words of “Other types of acceptable securities: none” shall be replaced by “A Bid Security issued by a first-class reputable foreign bank is acceptable, provided it is counter-guaranteed by an A-Class commercial bank in Nepal.”

1.2 Section VIII: Particular Conditions (PC)

(1) PC Sub-Clause 4.2

In addition to the provisions stated in Sub-Clause 4.2 of the Particular Conditions, the following shall apply:

“Performance Security may be submitted separately for each Section of the Works, namely:

- (i) Substation Work,
- (ii) Transmission Line Work, and
- (iii) Distribution Line Work.

Each Performance Security shall correspond to ten percent (10%) of the Accepted Contract Amount for the respective Section and shall comply with all requirements stipulated in the Bidding Documents, including currency, form, and counter guarantee conditions."

(2) PC Sub-Clause 14.2

In addition to the provisions stated in Sub-Clause 14.2 of the Particular Conditions and the Schedule of Payments in Section IV, the following shall apply:

"Advance Payment Security may be submitted separately for each Section of the Works, namely:

- (i) Substation Work,
- (ii) Transmission Line Work, and
- (iii) Distribution Line Work.

Each Advance Payment Security shall correspond to the amount of advance payment applicable to the respective Section, calculated as ten percent (10%) of the Accepted Contract Amount for that Section, and shall comply with all requirements stipulated in the Bidding Documents, including currency, form, and counter guarantee conditions."

1.3 Annex IV-1 Form of Price Schedule

- (1) Item No. A1.8.3 (Description: Low Voltage Power and Control Cable, Unit: Lot, Quantity: 1) shall newly be inserted below Item No. A1.8.2 in Schedule No. 3 (A1): Supply of Plant (Off-Site) for A1 Birauta Substation, A. SUBSTATION WORK, on page A-3-1.
- (2) Item No. A2.3 Power & Control Cable in Schedule No.3 (A2): Supply of Plant (Off-Site) for A. Substation Work, A2 Lekhnath Substation on page no. A-3-3, the unit of this item shall be "No." and the quantity of this item shall be 1.
- (3) Item No. A2.3.1 Control Cable in Schedule No.3 (A2): Supply of Plant (Off-Site) for A. Substation Work, A2 Lekhnath Substation on page no. A-3-3, this item shall be deleted.
- (4) Item No. A3.3 Power & Control Cable in Schedule No.3 (A3): Supply of Plant (Off-Site) for A. Substation Work, A3 Syangja Substation on page no. A-3-4, the unit of this item shall be "No." and the quantity of this item shall be 1.
- (5) Item No. A3.3.1 Control Cable in Schedule No.3 (A3): Supply of Plant (Off-Site) for A. Substation Work, A3 Syangja Substation on page no. A-3-4, this item shall be deleted.
- (6) Item No. B1.6 Earth Continuity Wire (ECW) (1kV XLPE 185mm<sup>2</sup>) in Schedule No.3(B1): Supply of Plant (Off-Site) for B. Transmission Line, B1 Birauta Substation-LILO Branch Tower on page no. B-3-1, the word of this description shall be revised from "185mm<sup>2</sup>" to "240mm<sup>2</sup>".
- (7) Item No. B1.1 132kV 3x800mm<sup>2</sup> Triplex Cable in Schedule No.6(B): Mandatory Spare Parts, for B. Transmission Line, on page no. B-6-1, the quantity of this item shall be revised from "300 m" to "400m".

## 2. VOLUME-II OF THE BIDDING DOCUMENTS (FOR SUBSTATION WORKS)

2.1 Appendix-A1; Technical Particulars-

- (1) 1.1 Indoor Switchgear & Associated Equipment (145kV):  
The technical particulars of this item shall entirely be replaced by Attachment-1 attached hereto.
- (2) 1.2 Indoor Switchgear & Associated Equipment (12kV):  
The technical particulars of this item shall entirely be replaced by Attachment-2 attached hereto.

## 3. VOLUME-III OF THE BIDDING DOCUMENTS (FOR TRANSMISSION LINE WORKS)

3.1 Section VI-B2, Sub-Clause 7.12 Backfilling and Reinforcement; page no. B2-7-10:

The following sentence is to be added to the final paragraph.

"Road pavement restoration shall comply with the requirements stipulated in Sub-Clause 21.6 of Volume-4 Distribution Line Work, including temporary restoration (cold mix asphalt or steel plate) and permanent restoration (hot mix asphalt or concrete slab reinstatement as per DoR standards). As stated in the last sentence of Sub-Clause

21.6.1 of Volume-4, for roads with cement concrete surface, the entire concrete panel or slab shall be removed and replaced with a new concrete surface.”.

3.2 Section VI-B2; Sub-Clause 13.2.4 Test Equipment; page no. B2-13-4:  
The text of “The Bidder/Contractor shall provide the test....” In the first paragraph shall be read as “The Contractor shall provide the test....”.

**4. VOLUME-4 OF THE BIDDING DOCUMENTS (FOR DISTRIBUTION LINE WORKS)**

NIL

Encl.)

Attachment-1 : Technical Particulars - 1.1 Indoor Switchgear & Associated Equipment (145kV)

Attachment-2 : Technical Particulars - 1.2 Indoor Switchgear & Associated Equipment (12kV)

End of Addendum No. 1

## 1 ELECTRICAL WORKS

### 1.1 Indoor Switchgear & Associated Equipment (145 kV)

No.	Item	Units	Required 145kV	Tendered 145kV
<b>1.1.1 High Voltage Gas Insulated Switchgear</b>				
1	Manufacturer's Name		-	
2	Country of Manufacture		-	
3.	Place of Testing		-	
4.	Applicable Standard - IEC		-	
5.	Manufacturer's type designation, and type ref or model number		-	
6.	Rated voltage	kV	145	
7.	Rated frequency	Hz	50	
8.	Maximum continuous system voltage at minimum gas pressure	kV	145	
9.	Impulse withstands voltage (peak) at minimum gas pressure	kV	650	
10.	Power frequency withstand voltage 1 min. at minimum gas pressure	kV	275	
11.	Power frequency withstand voltage at atmospheric pressure	kV		
12.	Rated short time withstand current	kA	40	
13.	Rated duration of short time withstand current	s	1	
14.	Rated peak short circuit current	kA		
15.	Heaviest part of any feeder for crane	kg		
16.	Feeder			
-	Width	mm		
-	Depth	mm		
-	Height	mm		
17.	Current SF6 gas replenishing	Yes/No	No	
18.	Annual leakage rate for each gas compartment	%	$\leq 0.1$	
19.	Material of filter employed for moisture absorption			
20.	Heat losses per feeder at rated Power			
<b>1.1.2 Busbars</b>				
1	Rated normal current	A	2000	
2.	Rated current at max. ambient temperature	A		

3.	Conductor Material			
4.	Standard applicable			
5.	Single conductor cross section	mm <sup>2</sup>		
1.1.3 Circuit Breaker				
1.	Manufacturer's Name			
2.	Manufacture's Address			
3.	Manufacturer's Type Designation			
4.	Applicable Standard			
5.	Type tested	Yes/No	Yes	
6.	Type test report, Ref. No.			
4.	Rated normal current at 20°C			
	- line feeder circuit breaker	A	1250	
	- bus coupler / section circuit breaker	A	2000	
	- 132kV/11kV transformer circuit	A	1250	
5.	Rated current at max. ambient temperature	A		
	- line feeder circuit breaker	A	1250	
	- bus coupler / section circuit breaker	A	2000	
	- 132kV/11kV transformer circuit breaker	A	1250	
6.	Rated short circuit breaking current (symmetrical, r.m.s.)	kA	40	
7.	Rated short circuit breaking current (asymmetrical, r.m.s.)	kA	40	
8.	Rated short circuit making current (peak)	kA	40	
9.	Rated cable charging breaking current	A		
10.	Rated line charging breaking current	A		
11.	Rated small inductive breaking current	A		
12.	Voltage drops across terminals of one pole at rated current	mV		
13.	Amplitude factor			
14.	First pole-to-clear factor		1.5	
15.	Rated operating sequence:		O-t-CO-t'-CO	
	- with t	sec.	0.3	
	- with t'	min.	3	
16.	Min. time t" between two successful three phase auto reclosures at full rated breaking current (sequence O-t-C-t"-O-t-C)	min.		
17.	Closing time	ms		



	- tolerances	ms		
18.	Dead time (max.)	ms		
	- tolerances	ms		
19.	Break time (max.) at full rated breaking current	ms		
	- tolerances	ms		
20.	Make time (max.)	ms		
	- tolerances	ms		
21	Arcing time (max.) at full short circuit duty	ms		
	- tolerances	ms		
22.	Life duration of main contacts (no load mechanical operations)	operations		
23.	Number of switching operations at rated breaking capacity before contact maintenance becomes necessary	No.	min. 10	
24	Rated pressure of SF6 for arc quenching	bar		
25.	Auxiliary contacts:			
	- number (NO/NC)			
	- voltage rating	V DC	110	
	- current rating	A DC		
26.	SF6 pressure at which lockout operates	bar		
27.	To be filled in only in case of hydraulic operating mechanism:			
	- Setting of pressure relief device	bar		
	- Rated pressure of hydraulic oil	bar		
	- Lowest oil pressure at which lockout	bar		
28.	Making coil			
	- Rated voltage	V DC	110	
	- min. operating voltage	V	88	
	- Rated power each	W		
29.	Trip coil			
	- Rated voltage	V DC	110	
	- min. operating voltage	V	88	
	- Rated power each	W		
30.	Motor voltage	V DC	110	
31.	Motor power	W		
32.	Total loss of heaters for 3 poles	W		

33.	Max. temperature rise of contacts at rated normal Current	K		
34.	Arc quenching medium		SF <sub>6</sub>	
35.	Material of main contacts			
36	Number of breaks in series (per pole)	No.		
	- for closing			
	- for opening			
37.	Single pole operation (only in Line Feeder Breakers)	Yes/No	No	
38.	Making coil:			
	- number	pcs		
39.	Trip coil:			
	- number	pcs	2	
40.	Gas quantity of complete breaker (3 Phase)	kg		
41.	Material of filter employed for the absorption of the products of combustion			
42.	Method of controlling voltage distribution between breaks (capacitor, resistor etc.)			
43.	Weight of complete 3 pole breaker	kg		
44.	Weight of heaviest part for shipment	kg		
<b>1.1.4 Disconnecting Switch</b>				
1.	Model No.			
2.	Type tested	Yes/No	Yes	
3.	Type test report, Ref. No.			
4.	Standards to which disconnector conforms		IEC 60129	
5.	Power frequency withstand voltage across isolating distance	kV	315	
6.	Lightning impulse withstand voltage across isolating distance	kV	750	
7.	Rated normal current at 20°C			
	- feeder disconnecting switch	A	1250	
	- bus coupler / section disconnecting switch	A	2000	
	-132/11kV transformer feeder disconnecting switch	A	1250	
8.	Rated current at max. ambient temperature:			
	-line feeder disconnecting switch	A	1250	

	- bus coupler / section disconnecting switch	A	2000	
	- transformer feeder disconnecting switch	A	1250	
9.	Voltage drops across terminals of one pole at rated current	mV		
10.	Rated breaking current (capacitive)	A		
11.	Rated momentary current (peak)	kV		
12.	Life duration of main contacts	operations		
13.	Material of main contacts			
14.	Auxiliary contacts:			
	- number (NO/NC)	pcs/pcs		
	- voltage rating	V DC	110	
	- current rating	A DC		
15.	Operating mechanism:			
	- for closing		Electric motor	
	- for opening		Electric motor	
16.	Manual operating facility	Yes/No	Yes	
17.	Motor voltage	V DC	110	
18.	Motor power	W		
19.	Hand operating facilities	Yes/No		
20.	Weight			
	- 3 phase unit with driving mechanism	kg		
21.	Mechanism heater loss	W		
<b>1.1.5 Maintenance Earthing Switch</b>				
1.	Type tested	Yes/No	Yes	
2.	Type test report, Ref. No.			
3.	Standards to which earthing switch conforms			
4.	Life duration of main contacts	operations		
5.	Material of main contacts			
6.	Auxiliary contacts:			
	- number (NO/NC)	pcs/pcs		
	- voltage	V DC	110	
7.	Operating mechanism:			
	- for opening		Electric motor	
	- for closing		Electric motor	

8.	Motor voltage	V DC	110	
9.	Motor power	W		
10.	Hand operating facilities	Yes/No	Yes	
<b>1.1.6 High Speed Earthing Switch</b>				
1.	Type tested	Yes/No	Yes	
2.	Type test report, Ref. No.			
3.	Standards to which earthing switch conforms			
4.	Making current	kA r.m.s	40	
5.	Number of closing operations with maximum short circuit current before the contact maintenance becomes necessary	No	2	
6.	Short circuit withstand duration	s	1	
7.	Life duration of main contacts	operations		
8.	Material of main contacts			
9.	Auxiliary contacts:			
	- number (NO/NC)	pcs/pcs		
	- voltage	V DC	110	
10.	Operating mechanism:			
	- for closing			
	- for opening			
11.	Max. Operating time			
	- for closing	ms		
	- for opening	ms		
12.	Motor voltage	V DC	110	
13.	Motor power	W		
14.	Hand operating facilities	Yes/No	Yes	
<b>1.1.7 Current Transformer</b>				
1.	Type			
2.	Standards to which CT conforms	IEC	60044-1	
3.	Rated secondary current	A	1	
4.	Rated primary current and number of cores	A	See Scope of Works and drawings	
5.	Rated momentary current (peak)	kA	100	

6.	Rated short-time current	kA	40	
7.	Measuring cores:			
	- Accuracy class		0.5	
	- Burden			
	- Resistance of secondary winding at 75 °C	Ohms		
	- Instrument security factor			
8.	Protection cores:			
	- accuracy class protection cores min. (higher class to be used wherever necessitated due to protection requirements)		5P	
	- Resistance of secondary winding protection cores at 75 °C	Ohms		
	- Resistance of secondary winding busbar protection cores at 75 °C	Ohms		
9.	Number of cores	Nos.	See Scope of Works and drawings	
10.	Knee point e.m.f. of protection cores	V		
11.	Knee point e.m.f. of busbar protection cores	V		
12.	Insulation material for windings			
13.	Limits on exciting current			
14	Partial discharge		According to IEC 60044-1	
<b>1.1.8 Voltage Transformer</b>				
1.	Type			
2.	Standards	IEC	IEC 60044-2	
3.	Method of transformation (inductive or capacitive)		inductive	
4.	Nominal primary voltage	kV	132/√3	
5	Number of secondaries and accuracy class		See Scope of Works & Drawings	
6	Thermal capacity of ground-fault detection winding	A/h		
7	Rated burden (total on all secondaries)	VA		

8.	Partial discharge		According to IEC 60044-2	
9.	Height	mm		
10.	Weight of single pole unit	kg		
<b>1.1.9 Local Control Unit for each switch bay</b>				
1.	Type			
2.	Manufacturer			
3.	Standards			
4.	Material			
5.	Thickness	mm		
6.	Surface finish			
7.	Dimensions: -			
	length	mm		
	width	mm		
	height	mm		
8.	Total net mass	kg		
<b>1.1.10 Gas Detector</b>				
1.	Manufacturer	-		
2.	Type	-		

## 1.2 INDOOR SWITCHGEAR & ASSOCIATED EQUIPMENT (12KV)

No.	Item	Units	Required 12kV	Tendered 12kV
1.2.1	Medium Voltage Gas Insulated Switchgear			
1.	Manufacturer's Name			
2.	Country of Manufacture			
3.	Place of Testing			
4.	Applicable Standard - IEC			
5.	Manufacturer's type designation and type ref. or model number			
6.	Rated voltage	kV	12	
7.	Rated frequency	Hz	50	
8.	Maximum continuous system voltage at minimum gas pressure	kV	12	
9.	Impulse withstands voltage (peak) at minimum gas pressure	kV	75	
10.	Power frequency withstand voltage 1 min. at minimum gas pressure	kV	28	
11.	Power frequency withstand voltage 1 min. at atmospheric pressure	kV		
12.	Rated short time withstand current:	kA	25	
13.	Rated duration of short time withstand current:	s	3	
14.	Rated peak short circuit current	kA		
15.	Heaviest part of any feeder for crane	kg		
16.	Feeder			
	- Width:	mm		
	- Depth:	mm		
	- Height:	mm		
17.	Current SF6 gas replenishing	Yes/No	No	
18.	Annual leakage rate for each gas compartment	%	$\leq 0.1$	
19.	Material of filter employed for moisture absorption			
20.	Heat losses per feeder at rated Power	kW		

<b>1.2.2 Busbars</b>				
1.	Rated normal current	A	2500	
2.	Rated current at max. ambient temperature	A	2500	
3.	Conductor material			
4.	Standard applicable			
5.	Single conductor cross section	mm <sup>2</sup>		
<b>1.2.3 Circuit Breaker</b>				
1.	Manufacturer's Name			
2.	Manufacture's Address			
3.	Manufacturer's Type Designation			
4.	Applicable Standard			
5.	Type tested	Yes/No	Yes	
6.	Type test report, Ref. No.			
4.	Rated normal current at 20°C			
	- line & aux. t/f /sub t line feeder circuit breaker	A	630/1250	
	- transformer feeder circuit breaker	A	2500	
	- bus section circuit breaker	A	2500	
5.	Rated current at max. ambient temperature	A		
	- line & aux. t/f/sub t line feeder/ line circuit breaker	A	630/1250	
	- transformer feeder circuit breaker	A	2500	
	- bus section circuit breaker	A	2500	
6.	Rated short circuit breaking current (symmetrical, r.m.s.)	kA	25	
7.	Rated short circuit breaking current (asymmetrical, r.m.s.)	kA	25	
8.	Rated short circuit making current (peak)	kA	78.75	
9.	Rated cable charging breaking current	A		
10.	Rated line charging breaking current	A		
11.	Rated small inductive breaking current	A		
12.	Voltage drops across terminals of one pole at rated current	mV		
13.	Amplitude factor			
14.	Frist pole –to-clear factor		1.5	

15.	Rated operating sequence:		O-t-CO-t'-CO	
	- with t	sec.	0.3	
	- with t'	min.	3	
16.	Min. time t" between two successful three phase auto reclosures at full rated breaking current (sequence O-t-C-t"-O-t-C)	min.		
17.	Closing time	ms		
	- tolerances	ms		
18.	Dead time (max.)	ms		
	- tolerances	ms		
19.	Break time (max.) at full rated breaking current	ms		
	- tolerances	ms		
20.	Make time (max.)	ms		
	- tolerances	ms		
21.	Arcing time (max.) at full short circuit duty	ms		
	- tolerances	ms		
22.	Life duration of main contacts (no load mechanical operations)	operations		
23.	Number of switching operations at rated breaking capacity before contact maintenance becomes necessary	No.	min. 25	
24.	skip			
25	Auxiliary contacts:			
	- number (NO/NC)			
	- voltage rating	V DC	110	
	- current rating	A DC		
26.	SF6 pressure at which lockout operates	bar		
27.	To be filled in only in case of hydraulic operating mechanism:			
	- Setting of pressure relief device	bar		
	- Rated pressure of hydraulic oil	bar		
	- Lowest oil pressure at which lockout			
28.	Making coil			
	- Rated voltage	V DC	110	
	- Min. operating voltage	V	88	
	- Rated power each	W		



29.	Trip coil			
	- Rated voltage	V DC	110	
	- Min. operating voltage	V	88	
	- Rated power each	W		
30.	Motor voltage	V DC	110	
31.	Motor power	W		
32.	Total loss of heaters for 3 poles	W		
33.	Max. temperature rise of contacts at rated normal Current	K		
34.	Arc. quenching medium		vacuum	
35.	Material of main contacts			
36.	Number of breaks in series (per pole)	No.		
	- For closing			
	- For opening			
37.	Single pole operation (only in Line Feeder Breakers)	Yes/No	No	
38.	Making coil:			
	- Number	pcs		
39.	Trip coil:			
	- Number	pcs	2	
40.	Gas quantity of complete breaker (3 Phase)	kg		
41.	Material of filter employed for the absorption of the products of combustion			
42.	Method of controlling voltage distribution between breaks (capacitor, resistor etc.)			
43.	Weight of complete 3 pole breaker	kg		
44.	Weight of heaviest part for shipment	kg		
<b>1.2.4 Disconnecting Switch</b>				
1.	Model No.			
2.	Type tested	Yes/No	Yes	
3.	Type test report, Ref. No.			
4.	Standards to which disconnector conforms		62271-200	
5.	Power frequency withstand voltage across isolating distance	kV	32	

6.	Lighting impulse withstand voltage across isolating distance	kV	85	
7.	Rated normal current at 20 °C			
	- Line and aux.t/f/sub t line feeder disconnecting switch	A	630/1250	
	- Bus section disconnecting switch	A	2500	
	- Transformer feeder disconnecting switch	A	2500	
8.	- Rated current at max. ambient temperature:			
	- Line and aux.t/f/sub t line feeder disconnecting switch	A	630/1250	
	- Bus section disconnecting switch	A	2500	
	- Transformer feeder disconnecting switch	A	2500	
9.	Voltage drops across terminals of one pole at rated current	mV		
10.	Rated breaking current (capacitive)	A		
11.	Rated momentary current (peak)	kA		
12.	Lite duration of main contacts	operations		
13.	Material of main contacts			
14.	Auxiliary contacts:			
	- number (NO/NC)	pcs/pcs		
	- voltage rating	V DC	110	
	- current rating	A DC		
15.	Operating mechanism:			
	- for closing		electric motor	
	- for opening		electric motor	
16.	Manual operating facility	Yes/No	Yes	
17.	Motor voltage	V DC	110	
18.	Motor power	W		
19.	Hand operating facilities	Yes/No		
20.	Weight			
	- 3 phase unit with driving mechanism	kg		
21.	Mechanism heater loss	W		
<b>1.2.5 Maintenance Earthing Switch</b>				
1.	Type tested	Yes/No	Yes	
2.	Type test report, Ref. No.			

3.	Standards to which earthing switch conforms			
4.	Life duration of main contacts	operations		
5.	Material of main contacts			
6.	Auxiliary contacts:			
	- number (NO/NC)	pcs/pcs		
	- voltage	V DC	110	
7.	Operating mechanism:			
	- for opening		Electric motor	
	- for closing		Electric motor	
8.	Motor voltage	V DC	110	
9.	Motor power	W		
10.	Hand operating facilities	Yes/No	Yes	
<b>1.2.6 Current Transformer</b>				
1.	Type			
2.	Standards to which CT conforms	IEC	60044-1	
3.	Rated secondary current	A	1	
4.	Rated primary current and number of cores	A	See Scope of Works and drawings	
5.	Rated secondary current (peak)	kA		
6.	Rated short-time current	kA		
7.	Measuring cores:			
	- Accuracy class		0.5	
	- Burden			
	- Resistance of secondary winding at 75°C	Ohms		
	- Instrument security factor			
8.	Metering cores:			
	- Accuracy class		0.2	
	- Burden			
	- Instrument security factor			
9.	- Protection cores:			
	- Accuracy class protection cores min. (higher class to be used wherever necessitated due to protection requirement)		5P	

	- Resistance of secondary winding protection cores at 75°C	Ohms		
	- Resistance of secondary winding busbar protection cores at 75°C	Ohms		
10.	Number of cores	Nos.	See Scope of Works and drawings	
11.	Knee point e.m.f. of protection cores	V		
12.	Knee point e.m.f. of busbar protection cores	V		
13.	Insulation material for windings			
14.	Limits on exciting current	A		
15.	Partial discharge		According to IEC 60044-1	

#### 1.2.7 Voltage Transformer

1.	Type			
2.	Standards	IEC	IEC 60044-2	
3.	Method of transformation (inductive or capacitive)		inductive	
4.	Nominal primary voltage	kV	11/ $\sqrt{3}$	
5.	Number of secondaries and accuracy class		See Scope of Works & Drawings	
6.	Thermal capacity of ground-fault detection winding	A/h		
7.	Rated burden (total on all secondaries)	VA		
8.	Partial discharge		acc. IEC 60044-2	
9.	Height	mm		
10.	Weight of single pole unit	kg		

#### 1.2.8 Local Control Unit

1.	Type			
2.	Manufacturer			
3.	Standards			
4.	Material			
5.	Thickness	mm		

6.	Surface finish			
7.	Dimensions: -			
	length	mm		
	width	mm		
	height	mm		
8.	Total net mass	kg		