JAIPUR VIDYUT VITRAN NIGAM LIMITED
OFFICE OF THE SUPERINTENDING ENGINEER (MM-II)
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NO.JPD/SE/MM-II/SPO-V/TN-2522/D. 10073 DATED: 14/03/19

TN-2522
(12 KV OUTDOOR VCB KIOSKS)

CORRIGENDUM No. 1

The Price Adjustment Formula (Schedule-II) appearing against above tender enquiry is hereby revised as per revision issued in the IEEMA circular vide circular dated 20.02.19 and revised Price Adjustment Formula is enclosed herewith.

Further the Guarantee Technical Particulars (Schedule-V) is also hereby revised and same is also appended herewith.

Encls.: As above.

14/3/19
(P.K.SHRIVASTAVA)
SUPERINTENDING ENGINEER (MM-II)

Copy forwarded to the Superintending Engineer (IT), Jaipur Discom, Jaipur for arranging the hosting of above corrigendum at Nigam's website.

14/3/19
SUPERINTENDING ENGINEER (MM-II)

SCHEDULE- II **(REVISED)**

PRICE ADJUSTMENT FORMULA
12 KV OUTDOOR VCB KIOSKS (TN-2522)

The price quoted / confirmed is based on the input cost of raw materials / components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials/ components and all India average consumer price index number of industrial workers as specified in the price variation clause given below. In case of any variation in these prices and Index number, the price payable shall be subject to adjustment up or down in accordance with the following formula :-

$$P = \frac{P0}{100}\left(20 + 28\frac{IS}{IS0} + 26\frac{C}{C0} + 4\frac{AL}{AL0} + 9\frac{In}{In0} + 13\frac{W}{W0}\right)$$

Wherein,

P = Price payable as adjusted in accordance with the above formula.

PO = Price quoted / confirmed (Exclusive of all taxes and duties).

ISo = Wholesale price index for "Manufacture of basic metals" (Base: 2011-12 = 100) (refer notes). This index is as applicable for the month, three month prior to the date of tendering.

Co = Average LME settlement price of copper wire bars (refer notes).
This price is as applicable for the month, one month prior to the date of tendering.

Alo = Price of busbar grade aluminium (refer notes).
This price is as applicable on the first working day of the month, one month prior to the date of tendering.

Ino = Price of epoxy resin for indoor circuit breakers and switchgear (refer notes).
This price is as applicable on the first working day of the month, one month prior to the date of tendering. **OR**
Wholesale price index of insulator for outdoor circuit breakers (VBF and SDB) (refer notes)
This index number is as applicable for the month, three month prior to the date of tendering.

Wo= All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base 2001 = 100).
This index number is as applicable for the month, four months prior to the date of tendering.

For example, if the date of tendering falls in May, 2019, the applicable prices of copper (Co), aluminium bus bar (Alo) should be as on 1st April 2019 and wholesale price index of "Manufacture of basic metals" (ISo) and insulating material (Ino) should be as on 1st February 2019 and all India average consumer price index number (Wo) should be for the month of January, 2019.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA (PVC)SWGR(R-1)/__/__ONE prevailing as on first working day of the month _____ i.e. one month prior to the date of tendering.

IS = Whole sale price index for "Manufacture of basic metals" (Base: 2011-12 = 100) (refer notes).
This index is as applicable on the first working day of the month, four months prior to the date of delivery.

C = Average LME settlement price of copper wire bars (refer notes).
This price is as applicable on the first working day of the month, two months prior to the date of delivery.

Al = Price of busbar grade aluminium (refer notes).
This price is as applicable on the first working day of the month, two months prior to the date of delivery.

In = Price of epoxy resin for indoor circuit breakers and switchgear (refer notes).
This price is as applicable on the first working day of the month, two month prior to the date of tendering.
OR
Wholesale price index of insulator for outdoor circuit breakers (VBF and SDB) (refer notes)
This index number is as applicable for the month, four month prior to the date of tendering.

W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base 2001 = 100).
This index number is as applicable for the months, five months prior to the date of delivery.

For example, if the date of tendering falls in June, 2019, the applicable prices of copper (Co), aluminium bus bar (Alo) should be as on 1st April 2019 and wholesale price index of "Manufacture of basic metals" (ISo) and insulating material (Ino) should be as on 1st February 2019 and all India average consumer price index number (Wo) should be for the month of January, 2019.

The "date of delivery' is the date on which the product is notified as being ready for inspection / dispatch. (In the absence of such notification the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

Note:- The base date will be 1.2.2019 irrespective of date of tender opening.

Schedule – V(A) **(REVISED)**

SCHEDULE OF GUARANTEED TECHNICAL PARTICULARS OF 12 KV OUTDOOR VCB KIOSKS AGAINST TN-2522

Sl. No.	PARTICULARS	To be furnished by the Bidder
	CIRCUIT BREAKERS	
1	NAME OF MANUFACTURER & COLLABORATOR, IF ANY	
(A)	OFFICE ADDRESS OF MANUFACTURER	
(B)	WORKS ADDRESS	
2	CONSTRUCTION TYPE OF BREAKER	
3	NO. OF POLES	
4	CLASS	
5	RATED VOLTAGE	
6	**RATED INSULATION LEVEL**	
(a)	LIGHTENING IMPULSE WITHSTAND VOLTAGE	
(b)	ONE MIN. POWER FREQ. WITHSTAND TEST VOLTAGE KV (rms)	
(c)	ONE MIN. POWER FREQ. WITHSTAND TEST VOLTAGE FOR AUXILIARY CIRCUITS KV (rms)	
7	RATED FREQUENCY	
8	RATED NORMAL CURRENT	
9	RATED SHORT CIRCUIT BREAKING CURRENT/ CAPACITY	
10	RATED SHORT TIME WITHSTAND CURRENT AND ITS DURATION	
11	RATED TRANSIENT RECOVERY VOLTAGE FOR TERMINAL FAULTS	
12	RATED SHORT CIRCUIT MAKING CURRENT	
13	RATED OPERATING SEQUENCE	
14	FIRST POLE TO CLEAR FACTOR	
15 (a)	OPENING TIME	
15 (b)	CLOSING TIME	
16	TOTAL BREAK TIME MEASURED FROM THE INSTANT OF TRIP CIRCUIT ENERGISATION	
(a)	AT 10% BREAKING CAPACITY	
(b)	AT 100% BREAKING CAPACITY	

17	PROTECTION CLASS OF KIOSK	
18	CONTACT TRAVEL	
(a)	LENGTH OF TRAVEL	
(b)	RATE OF TRAVEL	
19	MAKE TIME	
20	SPRING CHARGING TIME	
21	DEGREE OF VACUUM PROVIDED IN VCB	
22	OPERATING MECHANISM OF CIRCUIT BREAKER AND ITS ASSOCIATED EQUIPMENT	
22.1	TYPE OF CLOSING MECHANISM	
22.2	WHETHER THE CIRCUIT BREAKER IS TRIP FREE OR FIXED TRIP AND WHETHER IT IS WITH LOCKOUT PREVENTING CLOSING	
22.3	RATED SUPPLY VOLTAGE OF CLOSING MECHANISM	
22.4	CURRENT REQUIRED AT RATED SUPPLY VOLTAGE TO CLOSE THE CIRCUIT BREAKER	
22.5	RATED SUPPLY VOLTAGE OF SERIES/ SHUNT OPENING RELEASE	
22.6	CURRENT REQUIRED AT RATED VOLTAGE FOR SERIES/ SHUNT OPENING RELEASE	
22.7	NO. AND TYPE OF SPARE AUXILIARY SWITCHES/ CONTACTS	
22.8	CURRENT REQUIRED AT RATED SUPPLY VOLTAGE BY OTHER AUXILIARIES	
23	**OTHER INFORMATION**	
23.1	(a) TYPE OF BREAKER (DRAWOUT/ FIXED)	
	(b) TYPE OF ISOLATION (VERTICAL/ HORIZONTAL)	
23.2	TYPE OF ARC CONTROL DEVICE	
23.3	**CONTACTS**	
(a)	**MAIN**	
(I)	TYPE	
(II)	MATERIAL	
(III)	SILVER FACING PROVIDED	
(iv)	DESIGN CONTACT PRESSURE	
(b)	**ARCING CONTACTS**	
(I)	TYPE	
(II)	MATERIAL	
(III)	SILVER FACING PROVIDED	
(IV)	DESIGN CONTACT PRESSURE	
23.4	**LIFE**	
(I)	MECHANICAL OPERATIONS	
(II)	ELECTRICAL OPERATIONS	
(III)	SHORT CIRCUIT OPERATIONS	

23.5	MAXIMUM TEMPERATURE RISE OVER AN AMBIENT TEMPERATURE OF 50° C	
23.6	TRANSIENT BEHAVIOUR DETAILS	
(a)	PF RECOVERY VOLTAGE BETWEEN PHASES	
(b)	PEAK TRANSIENT RECOVERY VOLTAGE	
©	RATE OF RISE OF RECOVERY VOLTAGE	
23.7	WHETHER THE CIRCUIT BREAKER IS RESTRIKE FREE	
23.8	DETAILS OF INTERLOCKS PROVIDED	
23.9	DERATING FACTOR FOR SPECIFIED 50 DEG. C. AMBIENT TEMPERATURE AND SITE CONDITION, IF ANY	
23.10	MAXIMUM CHOPPING CURRENT	
23.11	VACUUM INTERRUPTED DETAILS	
(a)	MAKE AND CODE NUMBER OF VACUUM BOTTLE	
(b)	PRESSURE INSIDE INTERRUPTER	
(C)	MANUFACTURER'S CODE NO. / REFERANCE STANDARD	
23.12	CONTACT WEAR INDICATION	
23.13	MAX. OVER VOLTAGE ON SWITCHING TRANSFORMER ON NO LOAD.	
24	THICKNESS OF SHEET STEEL	
25	WHETHER COLD ROLLED OR HOT ROLLED	
	11 KV VOLTAGE TRANSFORMER	
1	MANUFACTURER'S NAME	
2	TYPE DESIGNATION	
3	HIGHEST EQUIPMENT VOLTAGE	
4	NO. OF PHASES	
5	SYSTEM EARTHING	
6	INSULATION LEVEL	
(a)	ONE MINUTE POWER FREQUENCY WITHSTAND VOLTAGE	
(I)	PRIMARY WINDING	
(II)	SECONDARY WINDING	
(b)	IMPULSE WITHSTAND VOLTAGE	
7	FREQUENCY	
	TRANSFORMATION RATIO	
	RATED OUTPUT	
	ACCURACY CLASS	
	WINDING CONNECTION	
	RATED VOLTAGE FACTOR	
13	TYPE	

13.1	RESIN CAST OR OIL FILLED	
13.2	WHETHER SINGLE PHASE OR THREE PHASE	
13.3	TYPE OF FUSES PROVIDED	
(a)	PRIMARY	
(b)	SECONDARY	
©	MAKE	
	CURRENT TRANSFORMERS	
1	MANUFACTURER'S NAME	
2	TYPE DESIGNATION	
3	RATED VOLTAGE	
4	TYPE OF INSULATION WHETHER OIL FILLED OR RESIN CAST	
5	INSULATION LEVEL	
5.1	ONE MINUTE POWER FREQUENCY WITHSTAND VOLTAGE	
5.2	IMPULSE WITHSTAND VOLTAGE	
5.3	PF WITHSTAND VOLTAGE FOR SECONDARY	
6	FREQUENCY	
7	TRANSFORMATION RATIO	
8	RATED OUTPUT	
9	CLASS OF ACCURACY	
10	INSTRUMENT SECURITY FACTOR	
11	SHORT TIME THERMAL CURRENT AND ITS DURATION	
12	SECONDARY WINDING RISE AT 75 DEG.C	
13	KNEE POINT VOLTAGE	
14	MAXIMUM EXCITING CURRENT IN RMS	
	RELAYS	
1	MANUFACTURER'S NAME	
2	TYPE DESIGNATION	
3	RATED CT SECONDARY CURRENT.	
4	TAP RANGE	
5	VA BURDEN	
	1) HIGHEST TAP	
	2) LOWEST TAP	
6	RATED VOLTAGE OF COIL FOR OPERATION.	
7	WHETHER RELAY IS ABLE TO STORE A MINIMUM OF FIVE FAULT VALUES INCLUDING FAULT LEVEL AND PHASE WITH DATE & TIME.	
8	WHETHER RELAY IS MOUNTED IN FLUSH PATTERN ON THE PANEL BOARD.	
9	WHETHER TEST BLOCKS PROVIDED AS PER SPEC.	

10	WHETHER NUMERICAL RELAY IS WITH COMMUNICATION FACILITY AND STANDARD OPEN PROTOCOL / SCADA COMPATIBILITY ALONGWITH IED FOR PURPOSE OF SCADA	
11	WHETHER COMMUNICATION ON RS-485 PORT PROTOCOL PROVIDED.	
12	TYPE OF CHARACTERISTIC	
13	DESCRIPTIVE LEAFLET ATTACHED OR NOT	
14	ACCURACY CLASS OF CT NEEDED	
15	RANGE OF SETTING FOR OVER CURRENT AND EARTH FAULT PROTECTION.	
16	WHETHER DRAWOUT TYPE	
	MEMORY TYPE STATIC HT TVM ENERGY METER	
1	NAME OF MANUFACTURER	
2	TYPE OF METER	
3	CLASS OF ACCURACY	
4	REFERENCE VOLTAGE	
5	BASIC CURRENT	
6	MAXIMUM CONTINUOUS CURRENT	
7	WHEATHER SEALING ARRANGEMENT PROVIDED ON FRONT SIDE OF METER FOR METER BODY/ TERMINAL COVER / MD RESET BUTTON/ COMMUNICATION PORT.	
8	PROGRAMMED INTO METER MEMORY FOR IDENIFICATION THROUGH CMRI	
9	BURDEN AND WATT LOSS OF VOLTAGE CIRCUIT PER PHASE.	
10	PUSH BUTTON MODE AS PER SPECIFICATIONS PROVIDED OR NOT	
11	MEMORY NON- VOLATILE OR BATTERY BACKED	
12	WHETHER ENERGY METER CONFIRMING TO IS AND HAVING ALL THE PARAMETER REQUIRED AS PER LATEST SPEC. OF JVVNL.	
	INDICATING AND INTEGRATING INSTRUMENTS	
(I)		
1	MANUFACTURER'S NAME	
2	TYPE DESIGNATION	
3	ACCURACY CLASS	
4	THE VA BURDEN AT NORMAL CURRENT AND OR NOMINAL VOLTAGE	
(a)	CURRENT COIL	
(b)	POTENTIAL COIL	

5	TRANSFORMATION RATIO OF INSTRUMENT TRANSFORMER FOR WHICH THE INSTRUMENT HAS BEEN ADJUSTED, IF RELEVANT	
6	SIZE	
7	WHETHER SUITABLE FOR SHEET STEEL MOUNTING	
8	COLOUR FINISH	
9	SHORT DURATION OVER LOAD CAPACITY	
10	MAKE AND TYPE OF SELECTOR SWITCH FOR AMMETER/ VOLTMETER	
(ii)	**CONTROL SWITCHES**	
1	MANUFACTURER'S NAME	
2	TYPE DESIGNATION	
3	TYPE OF HANDLE PROVIDED	
4	NO. OF POSITION	
5	NO. OF CONTACTS	
(a)	NORMALLY CLOSED	
(b)	NORMALLY OPENED	
6	MAKING/ BREAKING CAPACITY	
7	WHETHER SPRING RETURNED TO NORMAL OR STAY PUT TYPE	
8	TYPE OF LOCK PROVIDED	
(iii)	**INDICATING LAMPS**	
1	MANUFACTURER'S NAME	
2	TYPE DESIGNATION	
3	OPERATING VOLTAGE	
4	SIZE OF LAMP	
5	WATTAGE OF LAMPS	
6	COLOUR OF LAMP BODY	
(IV)	**SWITCH BOARD WIRING**	
1	INSULATION OF WIRING	
2	SIZE OF WIRING CONDUCTOR FOR	
(a)	CT CIRCUITS	
(b)	PT CIRCUITS	
©	AC SUPPLY CIRCUITS	
(d)	OTHER CIRCUITS	
3	SIZE OF EARTHING BAR FOR SAFETY EARTHING	
4	TYPE OF TERMINALS PROVIDED ON WIRING	
5	CONDUCTOR MATERIAL	
6	COLOUR USED	
(a)	AC CIRCUITS	
(I)	I PHASE	
(II)	II PHASE	
(III)	III PHASE	
(IV)	NEUTRAL	
(V)	EARTH	
(b)	DC CIRCUITS	
7	IDENTIFICATION OF SUFFIX USED FOR	

a)	METERING CIRCUITS	
(b)	O/C AND E/F INDICATION	
8	AC AUXILIARY CIRCUITS	
	MICELLANEOUS INFORMATION	
1	BUSHINGS	
(a)	MAKE AND DRAWING NO.	
(b)	TYPE OF BUSHING	
(c)	CREEPAGE DISTANCE	
(I)	TOTAL	
(ii)	PROTECTED	
(d)	ONE MINUTE POWER FREQUENCY WITHSTAND VOLTAGE FOR BUSHING	
	DRY	
	WET	
(e)	IMPULSE WITHSTAND VOLTAGE	
(f)	REFERENCE STANDARD	
(g)	PERMISSIBLE SAFE CANTILEVER LOADING ON BUSHING	
(h)	CATALOGUE NO. OF BUSHING OFFERED AND ITS MECHANICAL STRENGTH	
2	**MOTOR**	
a)	MAKE	
(b)	WATTAGE	
(c)	RATED VOLTAGE	
(d)	PROTECTION EQUIPMENT	
(e)	CLOSING CONTACTOR	
3	**TERMINAL CONNECTORS**	
a)	MAKE/ MATERIAL	
(b)	RATED CONTINUOUS CURRENT	
(c)	RATED SHORT TIME CURRENT FOR 3 SEC.	
(d)	MAXIMUM TEMPERATURE RISE OF TERMINAL CONNECTOR OVER AMBIENT TEMPERATURE OF 50 DEG. C AND MAXIMUM TEMPERATURE ATTAINED.	
4	**PAINT SHADE OF OUTDOOR KIOSK**	
5	**MAIN BUS BAR**	
a)	SIZE	
(b)	MATERIAL (COPPER ONLY)	
(c)	RATED SHORT TIME CURRENT FOR 3 SEC.	
(d)	CURRENT DENSITY	
6	INTER CONNECTING BUS BAR	
a)	SIZE	
(b)	MATERIAL (COPPER ONLY)	
(c)	RATED SHORT TIME CURRENT FOR 3 SEC.	
(d)	CURRENT DENSITY	

7	**CT WINDINGS**	
(a)	PRIMARY	
(i)	NO. OF TURNS	
(ii)	CROSS SECTIONAL AREA	
(iii)	MATERIAL	
(b)	SECONDARY	
(i)	NO. OF TURNS	
(ii)	CROSS SECTIONAL AREA	
(iii)	MATERIAL	
8	**LIST OF INTERLOCKS**	
(a)	MECHANICAL	
(b)	ELECTRICAL	
9	**OVERALL DIMENSIONS**	
9.1	FOR VACUUM CIRCUIT BREAKER KIOSK COMPLETE	
9.2	CIRCUIT BREAKERS	
9.3	IMPACT FOR FOUNDATION DESIGN TO INCLUDE DEAD LOAD PLUS IMPACT VALUE ON OPENING AT MAXIMUM INTERACTING RATING IN DEAD LOAD	
10	**CONSTRUCTIONAL FEATURES**	
(a)	MASS OF COMPLETE CIRCUIT BREAKER WITH MECHANISM AND VACUUM BOTTLE	
(b)	MASS OF VACUUM BOTTLE	
(c)	NO. OF BREAKERS IN SERIES PER POLE.	
(d)	MINM. CLEARANCE IN AIR.	
(I)	BETWEEN POLES	
(ii)	TO EARTH	
11	ARRANGEMENT PROVIDED	
	POLE DISCREPANCY	
(a)	TRIP FREE / FIXED TRIP	
(b)	ANTI PUMPING	
12	CONNECTION FOR CT	
(a)	SIZE	
(b)	MATERIAL	
13	CONNECTION FOR PTs	
(a)	SIZE	
(b)	MATERIAL	

Name of Firm
Signature of Bidder
Designation & Seal
Date