

RAJASTHAN RAJYA VIDYUT PRASARAN NIGAM LIMITED

[Corporate Identity Number (CIN):U40109RJ2000SGC016485]

Regd. Office: RVPN Rest House, Pur Road, Bhilwara -311001

O/O THE EXECUTIVE ENGINEER (T&C) RVPNL BHILWARA

E-mail: xen.tnc.bhl@rvpn.co.in

MOBILE: 9413382245

NO.RVPNL/XEN/(T&C)/RVPN/BHL/2017-18/F/.C. works / D:27 DATE: 11.08.2017
M/S _____

Limited Enquiry Tender Under This Office TN- 03/2017-18

Notice Inviting Bids (NIB)

Limited Enquiry Tender Under This Office TN No-03/2017-18, are invited for construction works of following erection of-

S.N.	Particulars of works	Estimated cost	Tender cost	EMD Rs.	Last date for submission of BID.
1.	Erection of Galvanized steel structure, Laying of Earth mesh, Erection of equipment, Bus bar, Jumpers & Cable laying work etc for 01 no 33 KV CAPCITOR BANK bay at 132 KV GSS RAIPUR (BHILWARA)	Rs 63600 /-	Nil	Rs 1272-	21.08.2017

Filled in/completed tenders/Bids are invited & shall be accepted latest by up to 2.00 P.M. of dated 21.08.2017 & receipted tenders shall be opened on same day i.e. dated 21.08.2017 At 3.00 PM in the presence of the tenderer if available.

1. We have read carefully all terms & conditions/ instructions of the tender specification & accepted the same as enclosed with this NIT.
2. Rates will remain valid up to the completion of work.
3. Other terms & conditions are enclosed.

Encl:- G-Schedule

EXECUTIVE ENGINEER (T&C)
RVPNL, BHILWARA

Copy forwarded/submitted to following for information:-

1. The Superintending Engineer (T&C) RVPN BHILWARA.
2. The AO(T&C) RVPN BHILWARA
3. The FM(T&C) RVPN,AJMER through email to upload NIT on website of Nigam
4. Notice Board.

EXECUTIVE ENGINEER(T&C)
RVPNL, BHILWARA

**Terms & conditions of the Tender specifications of limited enquiry
Tender for Erection work of 33 KV CAPACITOR BANK Bay at 132 KV GSS RAIPUR
(Bhilwara) on BSR as on 01.04.2017, under limited enquiry Tender No TN-03/2017-18**

01 Prices: The price shown of above in G-schedule of work & rates are on RVPNL BSR as on 01.04.2017 vide RVPN/SE(Contracts-II)/xen-4/F./D-45 JAIPUR Dt-21.04.17 the contractor should be advised to quote the rates including all taxes/GST as applicable.

02 EMD deposit: You'll have to furnish the security deposit @ 2% of the contract value in cash or by bank draft to the AO T&C RVPN Bhilwara & enclosed copy with Tender.

03 Terms of payment: The payment or running payment if required any on the basis of the bill duly verified by the in charge of work & counter signed by the Executive Engineer Bhilwara & payment released by the AO T&C RVPN Bhilwara through RTGS/NEFT for quick & safe transfer of fund.

04 Quantities: The quantity given in G schedule are only provisional & can vary depending on the side condition. The payment shall be paid on basis of various terms of actual quantity of the work done at unit rate given in cause of schedule of work & prices the actual work can be increased/decreased as per side requirement with maximum increase of 20%.

05 Completion time: You'll have to complete work on order within a period of two month for which layout has to be given by Assistant Engineer (T&C) RVPN Bhilwara.

06 Penalty: Work completion period/time of contract is essence of contract if you fail to complete the work on order within stipulated period, the Nigam shall charge penalty @ 0.50% of the cost of unexecuted portion of the work per week or part their of subject to maximum 10% of total value of unexecuted portion of work contract however no penalty will be imposed if delay is due to obligation of purchaser not being fulfilled in time.

07 Contract Agreement: The contractor shall also require to execute a contract agreement on non judicial stamp paper worth rs 500/- duly signed accepted & notarized.

08 In charge of work: The work shall be carried out under supervision of AEN (T&C) RVPN Bhilwara under control of XEN (T&C) RVPN Bhilwara.

09 Extension in completion period: Any delay due to stoppage of work by Nigam will be compensated by way of extension of completion date.

10 Distribution of material: Material shall be delivered at the work site from the store of AEN (T&C) RVPN Bhilwara & site store.

11 Electricity rules: You'll carry out all the work in accordance with revised & latest provision under Indian electricity rules & Act made their under.

12 Wastages: The contractor shall have to make every effort to minimize the breakage losses & wastages of GSS material etc, supplied free of cost by nigam for construction of GSS.

The maximum celling for the wastage permitted is as under:-

S.No.	ITEM NAME	% WASTAGE PERMITTED (MAX.)
1.	Conductor & Earth wire	1%
2.	Insulator	1%
3.	Bolts & Nuts	No extra bolts & nuts shall be supplied 2%
4.	Hard ware & Accessories	1%
5.	M.S.Flat/M.S.Road	1%

The contractor shall maintained & submit the account of actual wastage with the MAS Account, In case wastage are more than permitted quantities then contractor shall have to compensate to Nigam for excess wastage by double the issue rate of material.

13 Scope of work: This contract covers erection & construction work of 33 kv bay which include all activities as mentioned in G schedule of work & G schedule/quoted rates the quantum of work involved as per enclosed G schedule of work (copy of detailed G schedule enclosed).

14 Erection insurance: The contractor shall take suitable storage come erection insurance policy for subject work material at his own cost. The Estimated cost of Project/material for insurance purpose shall be intimated by Engineer in charge of work. The insurance policy should be submitted to this office i.e. Executive Engineer (T&C) RVPN Bhilwara for its acceptance.

15. Quality check/Inspection: Surprise check of the vendor/supplier premises can be done by quality control, inspection & monitoring section of the RVPN'S cooperate office on a short notice for which all necessary arrangement towards inspection of the RVPN'S supply/work order are to be arranged by the vendor supplier for ensuring quality as per RVPN requirement. The vendor/supplier shall also provide all requisite co-operation/assistance & facility for such quality check/inspection.

16. Responsibilities: In case of any fatal/non fatal accident occurred during the execution of work all responsibilities will be borne by contractor & RVPN will not take any responsibility legal/financial.

17. DISPUTE: If any dispute in the above then the decision of the S.E.(T & C) RRVPNL Bhilwara remains' final for both.

18. Qualifying Requirement: The contractor have to registered in "E" category in RVPN and enclosed copy of same with tender

**Executive Engineer (T&C)
RVPN BHILWARA**

I AGREE TO DO THE ABOVE WORKS ON _____% ABOVE/BELOW IN G-SCHEDULE AMOUNT BASED ON 2017 BSR.

SIGNATURE OF CONTRACTOR

Name of Firm/Bidder. _____

Address _____

Phone No / Fax No _____

TIN/CST/RST/GST No- _____

Name of contact person _____

Contact No/Mobile No _____

Date /___/_____

Place _____

Name of Office: AEN- I (T&C) RVPN BHILWARA

Name of Work :Mesh Earthing, Structure and Equipment erection for 33 KV Capacitor Bank at 132 KV GSS Raipur (BHILWARA)


Reference : BSR AS ON 01.04.2017 VIDE RVPN/SE(Contracts-II)/XEN-4/F./D.45 JAIPUR Dated 21.04.17

Sr. NO.	Item no. of BSR	PARTICULARS OF WORK	UNIT	QTY.	RATE	AMOUNT In Rs.
1	2	3	4	5	6	7
	1	EARTH MESH WORK				
	A1	Laying earth mesh with 25mm./ 28mm dia M.S. rod at a depth of 0.80 metre from top level of foundations, including excavation of trench of required depth and backfilling of the same, transportation of M.S. Rod from site store to location, welding of M.S. Rod to M.S. Rod along the length, at crossings and with earth electrodes as per drawing, application of bitumen compound and covering with bitumen impregnated tape on all welded joints, for the type of soil prevalent at 0.80 metre below top level of foundations (M.S. Rod of above sizes & M.S. Flat as required shall be made available by RVPN)				
		(a) In case electricity is made available by RVPN without charges				
		i) Normal dry soil	Mtrs	50	24	1200.00
		ii) Hard soil / Murram / Black cotton soil	Mtrs	50	26	1300.00
	B1	Laying of earthing risers of 50x6 mm /50x10/ 50x12 mm size M.S. Flat at a depth of 0.80 metre from top level of foundation, including excavation of trench of required depth and back filling of the same, transportation of M.S. Flat from site store to locations, preparation of risers, bending as per requirement (after heating if neccessary), fixing on and welding / bolting / to equipment / structure and peaks of structures laying in the trench welding to the earth mesh of M.S. Rod as per drawing, including welding of extra length of M.S. Flat if required , application of bitumen compound and covering with bitumen impregnated tape on all welded joints, painting of all surfaces of risers above ground level with red oxide and green paint for the type of soil prevalent at 0.80 metre below top level of foundations (M.S. Rod of above sizes & M.S. Flat as required shall be made available by RVPN)				
		(a) In case electricity is made available by RVPN without charges				
		i) Normal dry soil	Mtr	50	27	1350.00
		ii) Hard soil / Murram / Black cotton soil	Mtr	50	28	1400.00
	C1	Placing / Driving of earth electrode of 25 / 28mm dia. M.S. Rod of length 3.30 meters (approx) to a depth of 3.80 meters from the top level of foundations, including excavation of pit as required and back filling of the same transportation of M.S. Rod from site store to locations cutting of M.S. Rod to desired length preparation of one end as spike if necessary, welding of earth electrode to earth mesh of M.S. Rod as per drawing application of bitumen compound and covering with bitumen impregnated tape on all welded joints, for the type of soil prevalent at 3.80 metres below top level of foundation (M.S. Rod of above sizes & M.S.Flat as required shall be made available by RVPN)				
		(a) In case electricity is made available by RVPN without charges				
		iii) Soft rock	Nos.	4	532	2128.00
	2	ERECTION OF SUB-STATION STEEL STRUCTURES columns, beams, lighting mast and equipment structures (excluding Circuit Breakers and Capacitor Banks) of all types including transportation of structure member nuts & bolts, Washers, etc. from site store to locations, their assembly, placing on foundation, fixing of template, with foundation bolts as required levelling and preparing for grouting as required , but excluding grouting. erection after grouting and tightening & punching of nuts & bolts (Maximum height of structures up to 20 meters)	MT	4.5	2321	10444.50
		C/F				17822.50

		B/F				17822.50
3		BUS- BAR WORK				
A		STRINGING of 220 KV, 132 KV, 33 KV & 11 KV Bus Bar of ACSR conductor, including transportation of conductor, disc insulators and tension hardware from site stores to location, laying and cutting required length of conductor. Cleaning and assembly of disc insulators as required along with fitting of bolted type or compression type tension hardware as made available (compression machine shall be provided by RVPN on rent free basis). Making up at one end, stringing of conductors between the beams with specified sag and tension, also equalizing sag and fitting spacers and spacers T-clamps for twin conductor, for three phases of conductors in each bus-section.				
		i) Single ACSR Panther	sect.	1	1165	1165.00
B		JUMPERS OF ACSR conductor (3 nos. Y- type) between bus to equipment or between equipment to equipment or between bus to bus, including transportation of conductor, disc insulators and hardware from site stores to locations, cleaning and assembly of disc insulators as required along with fitting of suspension hardware and erection as required, cutting required length of conductor, making connections, fixing of spacers & spacer T- clamps as required, tightening of clamps/ connectors, dressing, etc., for three phases.				
		i) Single ACSR Zebra/ panther conductor	Set	10	333	3330.00
4		STRINGING of Earth wire (size 7/ 3.15mm or 7/ 4.00mm), including transportation of earthwire, tension hardwares, etc., from site store to locations, laying and cutting required length of earthwire fitting of bolted type or compression type hardware as made available (compression machine shall be provided by RVPN on rent free basis) making up at one end, stringing of earthwire between structure peaks with specified sag and tension jumpering and connecting earth bonds. For single earthwire.				
			Each	2	292	584.00
5		ERECTION OF SUB-STATION EQUIPMENTS				
B		Erection of Current Transformer /Potential Transformer / Capacitive voltage Transformer/ Series Reactor / Residual Voltage Transformer / Neutral Current Transformer with clamps & connectors on already erected steel structure including transportation from site store to locations. Fabrication of base frame, fixing of terminal connectors, tightening of nuts & bolts etc., complete in all respects.				
		III) 33 KV OR 11KV CT / PT	Nos.	3	532	1596.00
D		Erection of Isolators on already erected steel structure including transportation of base frame P. I. "s. contacts. Mechanism box, clamps & connectors etc. from site store to locations. minor fabrication as required and fixing of terminal connectors etc., adjustment / alignment of isolator and its earth blade. If provided, for their smooth operation and final adjustment if required after jumpering.				
		iii) 33 KV and 11 KV				
		a) Without Earth Blade	Nos.	1	916	916.00
		b) With Single Earth Blade	Nos.	2	1364	2728.00
F		Erection of 2x33 KV or 2x11 KV Capacitor Bank, with Series reactors & Residual Voltage Transformers / Neutral Current Transformers, including transportation of equipment, structure members. Nuts & bolts, washers. Clamps & connectors etc. from site store to location assembly of structure their placing on foundation leveling and preparing for grouting as required but excluding grouting assembly of capacitor bank cells on frames as required & their connection as per manufactures drawings. fixing of terminal connectors etc.				
			Each	1	18466	18466.00
		C/F				46607.50

G Sch Cap Bank Raipur Bhilwara


Executive Engineer (T&C)
RRVPLN BHILWARA


Assistant Engineer-I (T&C)
RVPNL, BHILWARA


JEN (T&C)
RRVPLN BHILWARA

		B/F				46607.50
	H	Erection of 33 KV or 11 KV Circuit Breakers, including transportation of equipment, structure members. Nuts & bolts, Clamps & connectors accessories etc. from site store to location assembly of support structure their placing on foundation leveling and preparing for grouting as required but excluding grouting assembly/ placing of poles. Mechanism box, etc. on support structure as per manufacturers drawings fitting of terminal connectors, etc. but excluding commissioning of CB				
		i) 33 KV or 11 Outdoor type (VCB / SF 6)	Nos.	1	7404	7404.00
	I	Erection of Post Insulators on already erected structures including transportation of P.I.'s, nuts & Bolts . Clamps & connectors. Etc. from site store to locations, fabrication of base frame & assembly if required. fixing of clamps etc.				
		iii) 33 KV or 11 KV	Nos.	6	75	450.00
	6	Erection of Control & Relay Panels complete in all respects including transportation from site store to control room, placing on foundation / cable trench as per layout, interconnection between control & relay panels and with existing panels, fixing of side / top covers and doors earthing to existing earth strip in control room, connection of bus wiring to existing panels and between control and relay panel. As required.				
		iii) Simplex panel. DC Panel, RTCC Panel, PLCC Panel etc.	Nos.	1	632	632.00
	7	Erection of Marshalling Kiosk /Line Matching Unit (LMU) / Line Matching & Distribution Unit (LMDU) complete in all respect including transportation from site store to location, placing on foundation / cable trench as per layout, preparing for grouting of foundation bolts but excluding grouting etc.				
		ii) 33 KV or 11 KV marshalling Kiosk	Nos.	1	192	192.00
	10	LAYING AND TERMINATION OF CABLES				
	A	Control Cables				
		i) Laying of P.V.C. insulated unarmoured/ armoured control cables of 1.1 KV grade with copper conductor in cable trenches as per specification as required, including transportation of cable drums from site store to location laying in cable trenches, cutting to required length, placing them on cable/ racks/ cable trays/ & dressing. Including removing and re-fixing trench covers as required making necessary connections, testing, cable marking on both the terminating ends, etc. as required for all sizes from 2c x 2.5 sq. mm. to 20c x 2.5sq. mm. 4c x 4sq. mm. and 4c x 6sq. mm.				
		a) unarmoured control cable.	Metres	1000	5	5000.00
		ii) fixing of control cables in position with single compression nickel plated brass cable glands conforming to IS: 12943 & having three metal washers and one rubber ring, including preparation of cable and drilling of corresponding holes in gland plates, etc. as required, & including cost of cable gland for each cable gland of size				
		a) 19 mm unarmoured control cable	Nos.	30	44	1320.00
		c) 25 mm unarmoured control cable	Nos.	4	67	268.00
		iii) Termination of wires of cables with copper conductor using copper terminal ends (pin or ring type as required of Dowells or equivalent make as approved by the Engineer-in charge) duly crimped with crimping tool, including making wire ends ready for crimping, ferruling & dressing of wires, etc. as required, including cost of terminal ends for all wires for each cable at both ends for cables of the following sizes				
		c) 4c x 2.5 sq. mm	Each	10	43	430.00
		f) 12c x 2.5 sq. mm	Each	5	128	640.00
		C/F				62943.50

	B/F				62943.50
	in case all the wires of any cable are not got terminated then a deduction at the rate of Rs. 6.00 shall be made for each end of the wires not terminated.				
	i) 4c x 4.0 sq. mm	Each	10	57	570.00
	in case all the wires of any cable are not got terminated then a deduction at the rate of Rs. 7.00 shall be made for each end of the wires not terminated.				
	TOTAL			Rs	63513.50

ROUND OFF

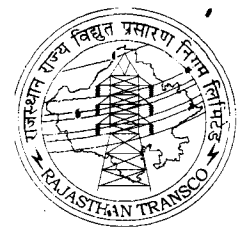
Rs 63514.00

(Rupees Sixty Three Thousand Five Hundred and Forteen)

An
Assistant Engineer-I (T&C)
RVPNL, BHILWARA

S. Gan
JEN (T&C)
RRVNL BHILWARA

R. Purohit
Executive Engineer (T&C)
RRVNL BHILWARA



RAJASTHAN RAJYA VIDYUT PRASARAN NIGAM LIMITED

[Corporate Identity Number (CIN):U40109RJ2000SGC016485]

Regd. Office: RVPN Rest House, Pur Road, Bhilwara -311001

O/O THE EXECUTIVE ENGINEER (T&C) RVPNL BHILWARA

E-mail: xen.tnc.bhl@rvpn.co.in

MOBILE: 9413382245

NO.RVPNL/XEN/(T&C)/RVPN/BHL/2017-18/F/.C. works / D: 226 DATE: 11.08.2017
M/S _____

Limited Enquiry Tender Under This Office TN- 04/2017-18

Notice Inviting Bids (NIB)

Limited Enquiry Tender Under This Office TN No-04/2017-18, are invited for construction works of following erection of-

S.N.	Particulars of works	Estimated cost	Tender cost	EMD Rs.	Last date for submission of BID.
1.	Erection of Galvanized steel structure, Laying of Earth mesh, Erection of equipment, Bus bar, Jumpers & Cable laying work etc for 01 no 33 KV CAPCITOR BANK bay at 220 KV GSS Bhilwara.	Rs 82900 /-	Nil	Rs 1658-	21.08.2017

Filled in/completed tenders/Bids are invited & shall be accepted latest by up to 2.00 P.M. of dated 21.08.2017 & receipted tenders shall be opened on same day i.e. dated 21.08.2017 At 3.00 PM in the presence of the tenderer if available.

1. We have read carefully all terms & conditions/ instructions of the tender specification & accepted the same as enclosed with this NIT.
2. Rates will remain valid up to the completion of work.
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Encl:- G-Schedule

EXECUTIVE ENGINEER (T&C)
RVPNL, BHILWARA

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1. The Superintending Engineer (T&C) RVPN BHILWARA.
2. The AO(T&C) RVPN BHILWARA
3. The FM(T&C) RVPN,AJMER through email to upload NIT on website of Nigam
4. Notice Board.

EXECUTIVE ENGINEER(T&C)
RVPNL, BHILWARA

**Terms & conditions of the Tender specifications of limited enquiry
Tender for Erection work of 33 KV CAPACITOR BANK Bay at 220 KV GSS Bhilwara on
BSR as on 01.04.2017, under limited enquiry Tender No TN-04/2017-18**

01 Prices: The price shown of above in G-schedule of work & rates are on RVPNL BSR as on 01.04.2017 vide RVPN/SE(Contracts-II)/xen-4/F./D-45 JAIPUR Dt-21.04.17 the contractor should be advised to quote the rates including all taxes/GST as applicable.

02 EMD deposit: You'll have to furnish the security deposit @ 2% of the contract value in cash or by bank draft to the AO T&C RVPN Bhilwara & enclosed copy with Tender.

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04 Quantities: The quantity given in G schedule are only provisional & can vary depending on the side condition. The payment shall be paid on basis of various terms of actual quantity of the work done at unit rate given in cause of schedule of work & prices the actual work can be increased/decreased as per side requirement with maximum increase of 20%.

05 Completion time: You'll have to complete work on order within a period of two month for which layout has to be given by Assistant Engineer (T&C) RVPN Bhilwara.

06 Penalty: Work completion period/time of contract is essence of contract if you fail to complete the work on order within stipulated period, the Nigam shall charge penalty @ 0.50% of the cost of unexecuted portion of the work per week or part their of subject to maximum 10% of total value of unexecuted portion of work contract however no penalty will be imposed if delay is due to obligation of purchaser not being fulfilled in time.

07 Contract Agreement: The contractor shall also require to execute a contract agreement on non judicial stamp paper worth rs 500/- duly signed accepted & notarized.

08 In charge of work: The work shall be carried out under supervision of AEN (T&C) RVPN Bhilwara under control of XEN (T&C) RVPN Bhilwara.

09 Extension in completion period: Any delay due to stoppage of work by Nigam will be compensated by way of extension of completion date.

10 Distribution of material: Material shall be delivered at the work site from the store of AEN (T&C) RVPN Bhilwara & site store.

11 Electricity rules: You'll carry out all the work in accordance with revised & latest provision under Indian electricity rules & Act made their under.

12 Wastages: The contractor shall have to make every effort to minimize the breakage losses & wastages of GSS material etc, supplied free of cost by nigam for construction of GSS.

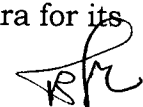
The maximum celling for the wastage permitted is as under:-

S.No.	ITEM NAME	% WASTAGE PERMITTED (MAX.)
1.	Conductor & Earth wire	1%
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3.	Bolts & Nuts	No extra bolts & nuts shall be supplied 2%
4.	Hard ware & Accessories	1%
5.	M.S.Flat/M.S.Road	1%

The contractor shall maintained & submit the account of actual wastage with the MAS Account, In case wastage are more than permitted quantities then contractor shall have to compensate to Nigam for excess wastage by double the issue rate of material.

13 Scope of work: This contract covers erection & construction work of 33 kv bay which include all activities as mentioned in G schedule of work & G schedule/quoted rates the quantum of work involved as per enclosed G schedule of work (copy of detailed G schedule enclosed).

14 Erection insurance: The contractor shall take suitable storage come erection insurance policy for subject work material at his own cost. The Estimated cost of Project/material for insurance purpose shall be intimated by Engineer in charge of work. The insurance policy should be submitted to this office i.e. Executive Engineer (T&C) RVPN Bhilwara for its acceptance.




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16. Responsibilities: In case of any fatal/non fatal accident occurred during the execution of work all responsibilities will be borne by contractor & RVPN will not take any responsibility legal/financial.

17. DISPUTE: If any dispute in the above then the decision of the S.E.(T & C) RRVPNL Bhilwara remains' final for both.

18. Qualifying Requirement: The contractor have to registered in "E" category in RVPN and enclosed copy of same with tender


Executive Engineer (T&C)
RVPN BHILWARA

I AGREE TO DO THE ABOVE WORKS ON _____% ABOVE/BELOW IN G-SCHEDULE AMOUNT BASED ON 2017 BSR.

SIGNATURE OF CONTRACTOR

Name of Firm/Bidder. _____

Address _____

Phone No / Fax No _____

TIN/CST/RST/GST No- _____

Name of contact person _____

Contact No/Mobile No _____

Date /___/_____

Place _____

'G Schedule'

Name of Office: AEN- I (T&C) RVPN BHILWARA

Name of Work :Mesh Earthing, Structure and Equipment erection for 33 KV Capacitor Bank at 220 KV GSS BHILWARA

Reference : BSR AS ON 01.04.2017 VIDE RVPN/SE(Contracts-II)/XEN-4/F./D.45 JAIPUR Dated 21.04.17

PWD BSR 13 For electrical work

Sr. NO.	Item no. of BSR	PARTICULARS OF WORK	UNIT	QTY.	RATE	AMOUNT In Rs.
1	2	3	4	5	6	7
	B1	Laying of earthing risers of 50x6 mm /50x10/ 50x12 mm size M.S. Flat at a depth of 0.80 metre from top level of foundation, including excavation of trench of required depth and back filling of the same, transportation of M.S. Flat from site store to locations, preparation of risers, bending as per requirement (after heating if necessary), fixing on and welding / bolting / to equipment / structure and peaks of structures laying in the trench welding to the earth mesh of M.S. Rod as per drawing, including welding of extra length of M.S. Flat if required , application of bitumen compound and covering with bitumen impregnated tape on all welded joints, painting of all surfaces of risers above ground level with red oxide and green paint for the type of soil prevalent at 0.80 metre below top level of foundations (M.S. Rod of above sizes & M.S. Flat as required shall be made available by RVPN)				
		(a) In case electricity is made available by RVPN without charges				
1		i) Normal dry soil	Mtr	50	27	1350.00
2		ii) Hard soil / Murram / Black cotton soil	Mtr	50	28	1400.00
2		ERECTION OF SUB-STATION STEEL STRUCTURES columns, beams, lighting mast and equipment structures (excluding Circuit Breakers and Capacitor Banks) of all types including transportation of structure member nuts & bolts, Washers, etc. from site store to locations, their assembly, placing on foundation, fixing of template, with foundation bolts as required levelling and preparing for grouting as required , but excluding grouting. erection after grouting and tightening & punching of nuts & bolts (Maximum height of structures up to 20 meters)	MT	1.25	2321	2901.25
3		BUS BAR Work				
	B	JUMPERS OF ACSR conductor (3 nos. Y- type) between bus to equipment or between equipment to equipment or between bus to bus, including transportation of conductor,disc insulators and hardware from site stores to locations, cleaning and assembly of disc insulators as required along with fitting of suspension hardware and erection as required, cutting required length of conductor, making connections, fixing of spacers & spacer T- clamps as required, tightening of clamps/ connectors, dressing, etc., for three phases.				
4		I) Single ACSR Zebra/ panther conductor	Set	10	333	3330.00
5		ERECTION OF SUB STATION EQUIPMENTS				
	B	Erection of Current Transformer /Potential Transformer / Capacitive voltage Transformer/ Series Reactor / Residual Voltage Transformer / Neutral Current Transformer with clamps & connectors on already erected steel structure including transportation from site store to locations. Fabrication of base frame, fixing of terminal connectors, tightening of nuts & bolts etc., complete in all respects				
5		III) 33 KV OR 11KV CT / PT	Nos.	3	532	1596.00
	D	Erection of Isolators on already erected steel structure including transportation of base frame P. I. "s. contacts. Mechanism box, clamps & connectors etc. from site store to locations. minor fabrication as required and fixing of terminal connectors etc., adjustment / alignment of isolator and its earth blade. If provided, for their smooth operation and final adjustment if required after jumpering.				
		C/F				10577.25

Spach
RF

		B/F				10577.25
		iii) 33 KV and 11 KV				
6		a) Without Earth Blade	Nos.	1	916	916.00
7		b) With Single Earth Blade	Nos.	2	1364	2728.00
8	F	Erection of 2x33 KV or 2x11 KV Capacitor Bank, with Series reactors & Residual Voltage Transformers / Neutral Current Transformers, including transportation of equipment, structure members. Nuts & bolts, washers. Clamps & connectors etc. from site store to location assembly of structure their placing on foundation leveling and preparing for grouting as required but excluding grouting assembly of capacitor bank cells on frames as required & their connection as per manufactures drawings . fixing of terminal connectors etc.	Each	1	18466	18466.00
	H	Erection of 33 KV or 11 KV Circuit Breakers, including transportation of equipment, structure members. Nuts & bolts, Clamps & connectors accessories etc. from site store to location assembly of support structure their placing on foundation leveling and preparing for grouting as required but excluding grouting assembly/ placing of poles. Mechanism box, etc. on support structure as per manufacturers drawings fitting of terminal connectors, etc. but excluding commissioning of CB				
9		i) 33 KV or 11 Outdoor type (VCB / SF 6)	Nos.	1	7404	7404.00
	6	Erection of Control & Relay Panels complete in all respects including transportation from site store to control room, placing on foundation / cable trench as per layout, interconnection between control & relay panels and with existing panels, fixing of side / top covers and doors earthing to existing earth strip in control room, connection of bus wiring to existing panels and between control and relay panel. As required.				
10		iii) Simplex panel. DC Panel, RTCC Panel, PLCC Panel etc.	Nos.	1	632	632.00
	7	Erection of Marshalling Kiosk /Line Matching Unit (LMU) / Line Matching & Distribution Unit (LMDU) complete in all respect including transportation from site store to location, placing on foundation / cable trench as per layout, preparing for grouting of foundation bolts but excluding grouting etc.				
11		ii) 33 KV or 11 KV marshalling Kiosk	Nos.	1	192	192.00
	10	LAYING AND TERMINATION OF CABLES				
	A	Control Cables				
		i) Laying of P.V.C. insulated unarmoured/ armoured control cables of 1.1 KV grade with copper conductor in cable trenches as per specification as required, including transportation of cable drums from site store fo location laying in cable trenches, cutting to required length, placing them on cable/ racks/ cable trays/ & dressing. Including removing and re-fixing trench covers as required making necessary connections, testing, cable marking on both the terminating ends, etc. as rquired for all sizes from 2c x 2.5 sq. mm. to 20c x 2.5sq. mm. 4c x 4sq. mm.and 4c x 6sq. mm.				
12		a) unarmoured control cable.	Metres	3500	5	17500.00
		ii) fixing of control cables in position with single compression nickel plated brass cable glands conforming to IS. 12943 & having three metal washers and one rubber ring, including preparation of cable and drilling of corresponding holes in gland plates, etc as required, & including cost of cable gland for each cable gland of size				
13		a) 19 mm unarmoured control cable	Nos.	30	44	1320.00
14		c) 25 mm unarmoured control cable	Nos.	4	67	268.00
		iii) Termination of wires of cables with copper conductor using copper terminal ends (pin or ring type as required of Dowells or equivalent make as approved by the Engineer-in charge) duly crimped with crimping tool, including making wire ends ready for crimping, ferruling & dressing of wires, etc. as required, including cost of terminal ends for all wires for each cable at both ends for cables of the following sizes				
		C/F				60003.25

[Handwritten signatures]

		B/F				60003.25
15		c) 4c x 2.5 sq. mm	Each	10	43	430.00
16		f) 12c x 2.5 sq. mm	Each	5	128	640.00
		in case all the wires of any cable are not got terminated then a deduction at the rate of Rs. 6.00 shall be made for each end of the wires not terminated.				
17		i) 4c x 4.0 sq. mm	Each	10	57	570.00
		in case all the wires of any cable are not got terminated then a deduction at the rate of Rs. 7.00 shall be made for each end of the wires not terminated.				
NON RVPN BSR ITEM TAKEN FROM PWD BSR FOR ELECTRICAL WORKS 2013						
	E130200	Laying XLPE insulated IS:7098/III/85 of Group1 and approved make H.T. cable for working voltage 33 KV Earthed direct in ground including excavation of 30cmx120cm size trench, 25cm layer of river sand, lind class bricks covering, refilling earth, compaction of earth, making necessary connection testing etc. as required of following size.				
18	E130203	3 core 150.0 sq mm	Mtr.	50	120	6000.00
	E130300	Providing & making heat shrinkable type indoor/outdoor/straight through terminations kit of Group1 and approved make suitable for XLPE insulated 33 KV Cable, with required components, preparation of cable ends, testing etc. as required of following size.				
	E130350	33 KV END Termination Kit Outdoor type				
19	E130321	3 Core 95/185 Sq mm	Set	2	7592.4	15184.80
		TOTAL			Rs.	82828.05

ROUND OFF

Rs. 82828.00

(Rupees Eighty Two Thousand Eight Hundred Twenty Eight Only)

S. Jain
JEN (T&C)
RRVNL BHILWARA

A. W.
Assistant Engineer-I (T&C)
RVPNL, BHILWARA

R. P. Singh
Executive Engineer (T&C)
RRVNL Bhilwara