

ABSTRACT

Name of Work: - Maintenance & Repairs to the HT Panel, Remote Control Panel, Temperature Scanner Panel, with allied devices (set) with Testing & Commissioning of 04 Nos. V.T. Forced Water Lubricated Pumps at Khadakpurna L.I.S. Stage 4 Deulgaon Raja Dist. Buldhana.

Sr. No.	Description	Qty.	Rate (Rs.)	Amount (Rs.)
1	Item No 1 :- INCOMER PANEL. A) Maintenance and repairs to the HT Incomer Panel :- Rated Voltage 6.6 KV 3 Phase 50 HZ draw out type having current capacity 630/800/1000/ 1250 Amp incoming Vacuum Circuit Breaker with AC Motor charged spring closing mechanism and facility for remote operation panels indoor type VCB Shall be consist of following equipments and devices. a) CT four As per existing induction motor capacity (core ratio rated current --- /1/1/1 Amp). One core for metering class I accuracy 15 VA burden and other core for protection class 5P-10, 15 VA burden. b) 2/3 Nos. Single phase double core potential transformer with ratio 6.6 KV/ /3 /110 V /3 core 1 will be class I accuracy and 100 VA burden and other for protection class with 100 VA c) Control switch for trip, neutral, close.d) Indication lamps-RYB, ON/OFF auto trip indication 110 volt DC e) Indication for trip circuit healthy, indication for 110 volt DC and with Trip circuit supervision Relay. B) Repair, replace or calibration of Protection Relays & Meters. :-Phase over current & Earth fault, IDMTL Relay, DC Rail relay, Auxiliary relay, single pole , instantaneous under voltage relay. Meters :- Voltmeter, Ammeter, Watt meter, KVA meter, energy meter & P.F. meteretc.f) IDMTL Relay with protection for over current setting 50 to 200 % & earth fault setting 20 to 80 % on IDMTL unit with common instantaneous setting range 500 to 2000 %. g) 96 sq mm ammeter and volt meter of suitable scale with 3 way and ON/OFF selector switch one each. h) Auxiliary Relay AC, DC fuses etc as required Remote/Local Selector switch with locking arrangement i) Space heater, remote/local selector switch. j) MWH meter RKVAH meter 3 phase 3 wire unbalanced load frequency meter and power factor meter showing the PF of the system (0.50 lag to 0.50 lead). (Rates are Approved by S E Mechanical Circle Nagpur Vide Letter No 2400/TS4. Dtd 07/09/2021.Item No 1)	2 Nos.	62693/-	125386.00
2	Item No 2 :- BUS COUPLER. A) Maintenance and repairs to the HT Buscoupler Panels :- Rated Voltage 6.6 KV 3 Phase 50 HZ draw out type having current capacity 630/800/1000/1250 Amp incoming Vacuum Circuit Breaker with AC Motor charged spring closing mechanism and facility for remote operation. panels indoor type VCB Shall be consist of following equipments&devices. a) VCB Panel protection of phase over current & earth relay high speed tripping relay, Auxiliary relay AC, DC Fuses etc as required Remote/local selector switch with locking arrangement.b) Control switch for trip, neutral, close.c) Indication lamps-RYB, ON/OFF auto trip indication 110 volt DC d) Indication for trip circuit healthy, indication for 110 volt DC and with Trip circuit supervision Relay.e) 96 sq mm ammeter and volt meter of suitable scale with 3 way and ON/OFF selector switch one each.f) Space heater, remote/local selector switch.g) CT four As per existing induction motor capacity (core ratio rated current --- /1/1/1 Amp). One core for metering class I accuracy 15 VA burden and other core for protection class 5P-10, 15 VA burden. h) 2/3 Nos. Single phase double core potential transformer with ratio 6.6 KV/ /3 /110 V /3 core 1 will be class I accuracy &and 100 VA burden & other for protection class with 100 VA. (Rates are Approved by S E Mechanical Circle Nagpur Vide Letter No 2400/TS4. Dtd 07/09/2021.Item No 2)	1 No.	39978/-	39978.00
3	Item No 3 :- OUT GOING FEEDERS FOR MOTORS WITH SPARE. A) Maintenance and repairs to the HT Outgoing Feeders Panels :- Rated Voltage 6.6 KV 3 Phase 50 HZ draw out type having current capacity 630/800/1000/1250 Amp incoming Vacuum Circuit Breaker with AC Motor charged spring closing mechanism and facility for remote operation. panels indoor type VCB Shall be consist of following equipments & devices. a) CT four As per existing induction motor capacity (core ratio rated current --- /1/1/1 Amp). One core for metering class I accuracy 15 VA burden and other core for protection class 5P-10, 15 VA burden. b) 2/3 Nos. Single phase double core potential transformer with ratio 6.6 KV/ /3 /110 V /3 core 1 will be class I accuracy and 100 VA burden and other for protection class with 100 VA. c) Control switch for trip, neutral, close.d) Indication lamps-RYB, ON/OFF auto trip indication 110 volt DC.e) Indication for trip circuit healthy, indication for 110 volt DC and with Trip circuit supervision Relay. B) Repair, replace or calibration of Protection Relays & Meters. :-	4 Nos.	62693/-	250772.00

	f) IDMTL Relay with protection for over current setting 50 to 200 % & earth fault setting 20 to 80 % on IDMTL unit, IDMTL unit common instantaneous setting range 500 to 2000%. g) 96 sq mm ammeter and volt meter of suitable scale with 3 way and ON/OFF selector switch one each. h) Auxiliary Relay AC, DC fuses etc as required Remote/Local Selector switch with locking arrangement i) Space heater, remote/local selector switch. j) Frequency meter and power factor meter showing the PF of the system (0.50 lag to 0.50 lead) k) Microprocessor based motor protection relay for each motor. l) Butterfly operation switches Open/ closed with indication lamps indicating valve. Position of fully open, fully closed, Partially open and Operating m) 96 sq mm ammeter with suitable scale with selector switch. n) High speed tripping relay Auxiliary relay terminal AC and DC fuses. (Rates are Approved by S E Mechanical Circle Nagpur Vide Letter No 2400/TS4. Dtd 07/09/2021. Item No 3)			
4	Item No 4 :- OUT GOING FEEDERS FOR AUX. TRANSFORMER.			
	A) Maintenance and repairs to the Outgoing Aux. Feeders Panels :- Rated Voltage 6.6 KV 3 Phase 50 HZ draw out type having current capacity 630/800/1000/1250 Amp incoming Vacuum Circuit Breaker with AC Motor charged spring closing mechanism and facility for remote operation. panels indoor type VCB Shall be consist of following equipments & devices. a) CT double core of any ratio rated current One core for metering class I accuracy 15 VA burden and other core for protection class 5P-10, 15 VA burden. b) Control switch for trip, neutral, close. c) Indication lamps-RYB, ON/OFF auto trip indication 110 volt DC e) Indication for trip circuit healthy, indication for 110 volt DC and with Trip circuit supervision Relay. f) 96 sq mm ammeter with suitable scale with selector switch. g) Microprocessor based motor protection relay for each motor. h) Butterfly operation switches Open/ closed with indication lamps indicating valve. Position of fully open, fully closed, Partially open and Operating i) Under voltage relay over current relay, High speed tripping relay Auxiliary relay terminal AC and DC fuses. (Rates are Approved by S E Mechanical Circle Nagpur Vide Letter No 2400/TS4. Dtd 07/09/2021. Item No 4)	1 No.	75037/-	75037.00
5	Item No 5 :- BATTERY CHARGER AND D.C.D.B..			
	Checking and replacing faulty devices it will be 30 Amp battery chargers with protective relays and control indications. Etc. Control switch for trip neutral close. Indicating lamps RYB ON / OFF for incoming A C Circuit. Three phase full wave rectifier bridge silicon controlled rectifiers. Set of fuses & surge diverters for diodes & SCRs Static control circuit. (Rates are Approved by S E Mechanical Circle Nagpur Vide Letter No 2400/TS4. Dtd 07/09/2021. Item No 5)	1 No.	58135/-	58135.00
6	Item No 6 :- Remote Control Panel for VT Pumps / HT Motors. :-			
	Repairing and replacing faulty devices of remote control panels with control switch, ammeter, annunciation facia windows, indication lamps etc. for control & monitoring of breakers, pump/motor ancillary equipment / panels etc. (Rates are Approved by S E Mechanical Circle Nagpur Vide Letter No 2400/TS4. Dtd 07/09/2021. Item No 6)	1 Set.	39957/-	39957.00
7	Item No 7 :- Temperature Scanner Panel :-			
	Repairing and replacing faulty devices of Temperature Scanner Unit. (i) Checking RTD of each motor. (ii) Providing & fitting of RTD with control cable 2.5 x 27 core control cable. (iii) Microprocessor based temperature scanner unit checking repairing and calibrating. (Rates are Approved by S E Mechanical Circle Nagpur Vide Letter No 2400/TS4. Dtd 07/09/2021. Item No 7)	1 Job.	49308/-	49308.00
	Total Rs.			638573.00
	Add GST 18 %			114943.14
			Total Rs	753516.14
			Say Rs	7,53,516/-

(Rs. Seven Lac Fifty Three Thousand Five Hundred & Sixteen Only)

Prepared by

S.S.Wankhade.

Sectional Engineer.

(Electrical)

DEPUTY ENGINEER

Lift Irrigation Mechanical & Electrical
Sub Division No.2, Chandrapur

(S.V.Nirkhe)

Deputy Engineer
Gate Mfg. & Erection
Sub-Division No.1, Akola.

Sanctioned & Recommended to
Sanction to Rs 7,53,516/-

Sanctioned Estimate No. 270 / SEMC/NGP/ 2024-25
Dated. 26/12/2024

Technically Sanctioned For Rs. 7,53,516/- (Rupees...)
Rs Seven Lakh Fifty Three Thousand

Executive Engineer
Mechanical Division
AKOLA

ABSTRACT

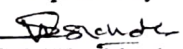
Name of Work: - Maintenance & Repairs to the HT Panel, Remote Control Panel, Temperature Scanner Panel, with allied devices (set) with Testing & Commissioning of 06 Nos. V.T. Forced Water Lubricated Pumps at Khadakpurna L.I.S. Stage 2 Deulgaon Raja Dist. Buldhana.

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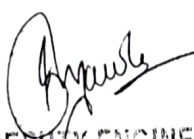
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	Total Rs.			763959.00
	Add GST 18 %			137512.62
			Total Rs	901471.62
			Say Rs	9,01,472/-

(Rs. Nine Lac One Thousand Four Hundred & Seventy Two Only)

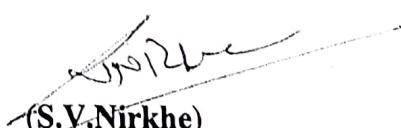
Prepared by


S.S. Wankhade.

Sectional Engineer.
(Electrical)


DEPUTY ENGINEER

Lift Irrigation Mechanical & Electrical
Sub Division No.2, Chandrapur


(S.V. Nirkhe)

Deputy Engineer
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Sub-Division No.1, Akola.

Verified & Recommended to:
Sanction to Rs. 9,01,472/-

Sanctioned Estimate No. 271/SEMC/NGP/2024-25
Dated 26.12.2024

Technically Sanctioned for Rs. 9,01,472/-

Rs Nine Lakh One Thousand Four Hundred

Executive Engineer
Mechanical Division
AKOLA