der Details

rganisation Chain	SECURITY PRINTING AND MINTING CORPORATION OF INDIA-SPMCIL||CURRENCY NOTE PRESS NASHIK(MH)||Purchase Deptt -SPMCIL		
ender Reference Number	6000019069		
ender ID	2025_SPMCI_224891_1	Withdrawal Allowed	Yes
ender Type	Open Tender	Form of contract	Works
ender Category	Works	No. of Covers	2
eneral Technical Evaluation llowed	No	ItemWise Technical Evaluation Allowed	No
ayment Mode	Offline	Is Multi Currency Allowed For BOQ	No
s Multi Currency Allowed For ee	No	Allow Two Stage Bidding	No

CURRENCY NOTE PRESS
(A UNIT OF Security Printing and Minting Corporation of India Limited) Wholly owned by Government of India
Nashik Road # 422101 (Maharashtra)
(ISO : 9001 & ISO 14001 Certified Unit)
Tel. No 00- 91-253-2463730-39, 2461471 Fax No:00-91-2532464100 CIN: U22213DL2006GOI144763 GSTIN : 27AAJCS6111J3Z6
Web: www.cnpnashik.spmcil.com E-mail: gmcnp@spmcil.com

PR Number	PR Date	Indenter	Department
12005954	17.11.2024	MSA	MECHANICAL

Not Transferable

Security Classification:

TENDER DOCUMENT FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF WATER PUMPS ALONG WITH ITS ACCESSORIES INCLUDING CIVIL WORKS ON TURNKEY BASIS AT EXISTING PUMP HOUSES AT CNP

Tender Number: 6000019069/, Dated: 25.01.2025

This Tender Document Contains_____Pages.

Details of Contact person in SPMCIL regarding this tender:

Name: RAJKUMAR R
Designation: Manager (MM)
Address: CNPN (Currency Note Press, Nashik)
India

RAJ.KUMAR@SPMCIL.COM

SECURITY PRINTING AND MINTING CORPORATION OF INDIA LIMITED

Tender Number:6000019069

Section1: Notice Inviting Tender (NIT)

6000019069 / (SPMCIL's Tender SI No.)

25.01.2025 (Date)

1. Sealed tenders are invited from eligible and qualified tenderers for supply of following goods & services:

Schd. No.	Brief Description of Goods/services	Quantity (with unit)	Earnest Money (In Rupee)	Remarks
1	Supply instal test commission water pump	1.000 AU	Rs. 3,89,000/- Rs. Three Lakhs Eighty Nine Thousand Only	

Type of Tender (Two Bid/ PQB/ EOI/ RC/ Development/ Indigenization/ Disposal of Scrap/ Security Item etc.)	TWO-BID National Competetive Bid
Dates of sale of tender documents:	AS PER CPP PORTAL
Place of sale of tender documents	AS PER CPP PORTAL
Closing date and time for receipt of tenders	AS PER CPP PORTAL
Place of receipt of tenders	AS PER CPP PORTAL
Time and date of opening of tenders	AS PER CPP PORTAL
Place of opening of tenders	AS PER CPP PORTAL
Nominated Person/ Designation to Receive Bulky Tenders (Clause 21.21.1 of GIT)	RAJKUMAR R Manager (MM)

2. Eligibility to participate as per Government of India's Public Procurement (Preference to Make in India) Order 2017 (as amended/ revised) and Ministry of Finance, Department of Expenditure, Public Procurement Division's Orders (Public Procurement 1, 2 and 3) F.No.6/18/2019-PPD dated 23rd/ 24th July 2020 (or any further amendments thereof) regarding eligibility of bidders from neighboring countries shall apply to this tender, if vendor registered under MSE for tendered services.

3. Please note that SPMCIL reserves its right to grant Purchase preferences in accordance with Government of India’s Public Procurement (Preference to Make in India) Order 2017 (as amended/ revised) and Public Procurement Policy for Micro and Small Enterprises (MSEs) Amendment Order, 2018 (as amended/ revised).

4. Interested tenderers may obtain further information about this requirement from the above office selling the documents. They may also visit our website mentioned above for further details.

5. Tenderer may also download the tender documents from the web site mentioned above and submit its tender by utilizing the downloaded document (Through e-tendering portal i.e. CPP Portal), the bidder must not make any changes to the contents of the documents, except for filling the required information. A certificate to this effect must be submitted by the bidder in the Tender Form (Section X).

6. Bidders may upload their bids through e-tendering portal i.e. CPP Portal), bidders must upload their bids along with scanned copies as required enclosures (including proof of cost of EMD as applicable) as per instructions given in this regard. Original copy of such scanned uploaded EMD, must reach in physical form within the date and place as provided in such instructions, otherwise their uploaded bid, would be declared as unresponsive.

7. In the event of any of the above-mentioned dates being declared as a holiday/ closed day for the purchase organisation, the tenders will be sold/ received/ opened on the next working day at the appointed time.

8. The tender documents are not transferable.

9. The bidder, their affiliates, or subsidiaries – including subcontractors or suppliers for any part of the contract – should not stand declared ineligible/ blacklisted/banned/ debarred by any Government Agency anywhere in the world, for participating in its tenders, under that country's laws or official regulations. A declaration to this effect shall be submitted by the bidder in the Tender Form (Section X).

10. (i)SUBMISSION OF TENDER: As per E-Procurement Portal. Bidders must upload their bids along with scanned copies as required enclosures (including proofs of cost of Tender Documents and EMD as applicable - unless an online payment gateway is provided in the instruction) as per instructions given in this regard.

(ii) Earnest Money Deposit: EMD shall be submitted in form as given below: (a) Account Payee Demand Draft, (b)

Fixed Deposit Receipt, (c) Banker's Cheque, (d) Electronic Fund Transfer (NEFT/RTGS). The demand draft, fixed deposit receipt or banker's cheque shall be drawn on any scheduled commercial bank in India. In favour of SPMCIL, Unit CNP, Payable at Nashik. Electronic fund transfer may be done to CNP account no. 201003551111 IFSC code: INDB0001451. The earnest money shall be valid for a period of forty five days beyond the validity period of the tender i.e. 165 days from due date. The EMD of un-successful bidders will be returned. Only One DD/FDR/Bankers Cheque should be given of adding all the item wise EMD amount as per tender quoted by the bidder.

11. In case of order material in your favour for Rs. 5,00,000/- or above, the supplier shall furnish the performance security amount/ Security Deposit(S.D) (10% of the ordered value) after issue of Purchase order by CNP, Nashik Road in favour of SPMCIL, Unit CNP, payable at Nashik. The performance security will be return back without any interest to successful bidder after the completion of all contractual obligations.

12. No exemption will be given for deposition of performance guarantee to any DIC/SSI/MSE/NSIC registered firm.

13. Any dispute in the matter will be under Nashik (Maharashtra) Jurisdiction only.

14. Right of acceptance: - The Chief General Manager, Currency Note Press reserves the right to reject any or all tenders without assigning any reason thereof.

15. Clarification of Tender Documents: A Bidder requiring any clarification or elucidation on any issue of the tender documents may take up the same with SPMCIL in writing or by fax / e-mail/ telex not later than twenty one days (unless otherwise specified in the SIT) prior to the prescribed date of submission of tender.

16. Any queries regarding the tender you may please contact at 0253-2454493 or 2461318. E-mail-purchase.cnpnashik@spmcil.com.

.....

.....
(Name Designation, Adress telephone number etc
of the officer signing the document)

For and on behalf of
.....

SECURITY PRINTING AND MINTING CORPORATION OF INDIA LIMITED

Tender Number:6000019069

Section II: General Instructions to Tenderers (GIT)
Part 1: General Instructions Applicable to all type of Tenderers

Please CLICK the link for further details

https://www.spmcil.com/spmcil/UploadDocument/GIT.pdf

Bidders are requested to download the above pages by clicking the above given link and submit the same duly stamped and signed along with tender document. Unsigned/stamped printouts of these pages are not acceptable.

Section III: Specific Instructions to Tenderers (SIT)

The following Special Instructions to Tenderers will apply for this purchase. These special instructions will modify/ substitute/ supplement the corresponding General Instructions to Tenderers (GIT) incorporated in Section II. The corresponding GIT clause numbers have also been indicated in the text below:

In case of any conflict between the provision in the GIT and that in the SIT, the provision contained in the SIT shall prevail.

(Clauses of GIT listed below include a possibility for variation in their provisions through SIT. There could be other clauses in SIT as deemed fit.)

Sr No	GIT Clause No.	Topic	SIT Provision
07	11.2	TENDER CURRENCY	Supplier is requested to quote price within 2 Decimal place.Quotation with price quote beyond 2 decimal place is ignored.
14	18.4, 18.5	EARNEST MONEY DEPOSIT (EMD)	The required EMD for the tender is Rs. 389000/- shall be submitted scan copy along with E-Tender Bid. EMD must be furnished along with the tender in the form of Demand Draft/Fixed Deposit Receipt/Bank Guarantee in INR drawn on any Scheduled Commercial
15	18.4, 18.5	EARNEST MONEY DEPOSIT (EMD)	Bank in favour of Currency Note Press, Nashik payable at Nashik
16	19	TENDER VALIDITY	120 Days from the date of opening of tender
17	20.4	NUMBER OF COPIES OF TENDERS TO BE SUBMITTED	One Copy through E-Tendering Portal i.e. CPP
18	20.8	TWO BID SYSTEM	Applicable
19	20.9	E-PROCUREMENT	Applicable
20	34. AND 35.1	COMPARISON ON CIF DESTINATION BASIS	FOR CNP Nashik Road Basis

Section IV: General Conditions of Contract (GCC)

Please CLICK the link for further details

https://www.spmcil.com/spmcil/UploadDocument/GCC.pdf

Bidders are requested to download all pages by clicking the above given link and submit the same duly stamped and signed along with tender document. Unsigned/stamped printouts of these pages are not acceptable.

Section V: Special Conditions of Contract (SCC)

The following Special Conditions of Contract (SCC) will apply for this purchase. The corresponding clauses of General Conditions of Contract (GCC) relating to the SCC stipulations have also been incorporated below. These Special Conditions will modify/ substitute/ supplement the corresponding (GCC) clauses.

Whenever there is any conflict between the provision in the GCC and that in the SCC, the provision contained in the SCC shall prevail.

(Clauses of GCC listed below include a possibility for variation in their provisions through SCC. There could be other clauses in SCC as deemed fit)

Sl.No.	GCC Clause No.	Topic	SCC Provision
02	6.1, 6.3 & 6.5	PERFORMANCE BOND/ SECURITY	10 % of the total contract price valid for 60 days beyond completion of contractual obligations including warranty period: if any.
09	16.2, 16.4	WARRANTY CLAUSE	The warranty will remain valid for a period of minimum 12 months from the date of successful installation, testing, commissioning and acceptance at site.
10	19.3	OPTION CLAUSE	CNP-Nashik reserves the right to exercise option clause up to 25% of the total value of contract at any time till the final delivery date of the contract by giving reasonable notice even though the work has been completed as per contract in full before
11	19.3	OPTION CLAUSE	the last date of delivery on the same term & conditions.
12	20.1	SHORT CLOSURE CLAUSE	Currency Note Press, Nashik reserves the right to short close the contract upon any change in requirement of CNPN on design/specification, National consideration, user requirement and indent etc. In addition to the GCC Clause 29
13	22.	TERMS AND MODE OF PAYMENTS	The Payment will me be made within 30 days after Suitability/Acceptance and Successful Completion of Installation, Testing & Commissioning of the tendered work.
14	22.	TERMS AND MODE OF PAYMENTS	The mode of payment will be through NEFT/RTGS only.
15	24.1	QUANTUM OF LD	If the supplier fails to deliver any or all of the goods or fail to perform the services within the time frame(s) incorporated in the contract, CNP-Nashik shall, without prejudice to other rights and remedies available to CNP-Nashik under the contract,
16	24.1	QUANTUM OF LD	deduct from the contract price, as liquidated damages, a sum equivalent to the 0.5% of the delivered price of the delayed goods and/or services for each week of delay or part thereof until actual delivery or performance, subject to a maximum deduction of
17	24.1	QUANTUM OF LD	the 10% of the delayed goods' or services' contract

Sl.No.	GCC Clause No.	Topic	SCC Provision
			price(s). If LD is levied the GST applicable on the LD shall also be collected from the firm.

Section VI: List of Requirements

Schedule No.	Breif Description of goods and services (Related Specifications etc.are in Section-VII)	Accounting Unit	Quantity	Amount of Earnest Money	Remark
1	Supply instal test commission water pump	AU	1.000	Rs. 3,89,000/- Rs. Three Lakhs Eighty Nine Thousand Only	

1. Required Delivery Schedule/Service: The firm has to complete all the work including Supply, Installation, Testing & Commissioning etc. within 06 Months from the date of issuance of NAC or Purchase order whichever is earliest.
2. Required Terms of Delivery: - FOR Currency Note Press, Nashik Road.
3. Destination: - CURRENCY NOTE PRESS, JAIL ROAD, NASHIK ROAD 422101
4. Bid Validity: 120 days from due date of tender.
5. Bidder have to open the link provided in Section II, IV & XII onwards and take print out of all the documents available and then sign and stamp each and every paper and submit along with the technical tender.
6. All the copies of tenders shall be complete in all respects with all their attachments/enclosures duly numbered.
7. RISK PURCHASE:

(a) If the supplier after submission of tender and due acceptance of the same, i.e. after placement of contract fails to abide by the terms & conditions of these tender documents, or fails to supply the deliverables as per delivery schedule given or at any time repudiates the contract, the purchaser shall have the right to Invoke the Security-cum-Performance Guarantee if deposited by the supplier and procure stores/take services from other agencies at the risk & consequence of the supplier. The cost difference between the alternative arrangement and supplier tendered value will be recovered from the supplier along with other incidental charges.

(b) In case of supply/job work through alternative sources at lower price, if any, then no benefit on this account will be passed on to the supplier.

(c) For all the purpose the award of contract will be considered acceptance of tender and formal contract pending signing of agreement. Supplier has to abide by all the terms and conditions of tender.

8. Bank Details: Copy of Cancelled Cheque or the Bank details on the letter head signed by Authorized signatory to be submitted.

SECURITY PRINTING AND MINTING CORPORATION OF INDIA LIMITED

TENDER NO: 6000019069

Section VII: Technical Specification

Scope of Work

Part- I CNP MAIN PUMP HOUSE

1. Construction of suitable RCC foundation arrangement with installation of foundation bolts for 2 Nos. 40 HP water Pumps, 02 Nos. 5 HP Priming Pumps and the electrical panels with Rewiring work & Lighting at appropriate locations inside of CNP Main Pump House.

2. Provision through fabrication of suitable angle iron frame structure of adequate capacity as recommended by the pump set manufactures for mounting of 2 Nos. 40 HP water Pumps and 02 Nos. 5 HP Priming Pump. On the foundation arrangement.

3. Erecting of angle iron frame structures through the foundation bolts on the constructed foundation arrangement along with proper alignments.

4. Erecting of 2 Nos. 40 HP water pump and 02 Nos. 5 HP priming Pump by fixing on angle iron frame structure through the mounting bolts with proper alignments of Pump & motor.

5. Installing of flange coupling on pump & motor shaft with proper alignment and fixing of flange guard in appropriate manner as directed by the Site In charge.

6. Supply & Installation of MS Suction pipe line along with supply & installation of foot valve & Interconnection of MS suction pipe lines of 250mm (Approx.) Size from CNP Underground Sump to inlets of the 2 Nos. 40 HP water pumps to be installed.

7. Installation & interconnection of delivery pipe lines of 200mm (Approx.) 2 Nos. 40 HP water Pump to existing delivery pipe lines of CNP.

8. The delivery pipe lines are to be connected to the existing pipe line feeding CNP through existing Pipe line arrangement of 2X40 HP water pumps. Hence, required addition/ alteration/ modification in the pipe lines will be considered & provided appropriately.

9. Installation of all required control valve, pipes & accessories on suction & delivery pipe lines of 2 Nos. 40 HP water Pumps either by flange jointing or by seam welding as per site requirements.

10. Installation of Dial type pressure gauges with pipe line connection, at least 1 per pump set, at suitable locations.

11. Installation of suction & delivery pipe lines with all required accessories inclusive of the supply part of the accessories and all required control valve for 02 Nos. 5 HP Priming Pump.

12. The priming pump will be installed appropriately with suitable control valve arrangement so that same priming pump can fulfill the requirement of both the 40 HP Pump sets.

13. Installation of air pressure surge release arrangement in appropriate manner as directed by the Site In charge. The air surge unit shall be properly Installed so as to remove air from the pipe line at every start and to minimize water hammer effect in the pipe at every stop of the pump due to power failures/tripping on faults.

14. The installation of pipe line work is involved with jointing of pipes by appropriate method of welding and installing of different type valves with special leak proof gaskets/sealant and hexagonal head nut bolts of ISI marked make with recommended tightening torque.

15. Provision of masonry supports/MS Clamp supports wherever felt essential for all suction & delivery pipe lines to prevent pipe lines from damage/deflection due to working pressure of the pumps.

16. Turnkey erecting of 2 Ton capacity electrically operated hoist along with supply of all required materials i.e. MS Girders, MS Angles, Electrical cables, Wires, Motor Controller, Push button Stations, Civil masonry works, Fabrication works as directed by the Site In charge.

17. Installation Testing and Commissioning of MCC Panel Board along with necessary civil works for grouting of panel board.

18. Making of suitable cable trenches, RCC, approx. size 05 m X 0.25 m X 0.25 m. (LxWxD), for laying of motor cables & earthing conductors of 2 Nos. 40 HP pumps & 02 Nos. 5 HP Priming Pump from MCC Panel Board to the motors terminal connection plates including provision of suitable MS Angle iron structures to hold the raising cable from ground to the heighted motor terminal plates.

19. Laying & termination of all incoming electric cables in to the MCC Panel Board through cable trench with clamping of the cable on the walls of the trench by means of suitable MS clamps.

20. Termination of existing incomer cable, into new MCC panel with correct size of cable glands and copper cable end lugs.

21. In case the length of the existing cable(s) are found short then bidder shall have to extend the same by jointing additional cable piece of same size through straight through joint kit of reputed make like Raychem/3M or equivalent make.

22. Laying of outgoing electric cables from individual motor controller in the MCC Panel Board to individual motor connection plate/box of the pump sets through cable trench with clamping of the cable on the walls of the trench by means of suitable MS clamps.

23. Termination of all outgoing electric control cables in to the MCC Panel Board and motor connection plate/box with correct size of brass cable gland and copper cable end lugs.

24. Laying & termination of all double earthing conductors from Earthing Pit to the MCC Panel Board and Pump Sets through cable trench with clamping of the conductors on the walls of the trench by means of suitable MS clamps.

25. Provision of cable trench covers plates with collapsible handles as directed by the Site In charge.

26. The metallic body of Pump, Motor, MCC panel and other equipment shall be double earthed through recommended earthing conductor i.e. Size 8 SWG, GI, Solid round conductor/equivalent.

27. The electrical insulation rubber mat of 1.1 KV grade shall be placed all around the MCC Panel Board as a safety provision Quantity as per MCC Panel Board size.

28. Supply & Installation of LED Batten Lights of 40W (Approx.) with complete rewiring work & provision of 5/16Amp 1Ph & 32Amp 3Ph Power Points at Appropriate location inside of CNP Pump House.

29. DISMANTLING OLD PUMP INSTALLATION The job involves complete dismantling, materials handling & shifting works as below: Existing Pumps, Motors, Suction, Delivery and Priming Pipe Lines and Control Valves: Complete LOT MCC PDB Electrical Panel Board: 1 Set. Resurfacing of damaged floor

surface and wall surface shifting of entire lot of dismantled materials in scrap yard as directed.

Part- II CNP AC PLANT PUMP HOUSE

1. Construction of suitable RCC foundation arrangement with installation of foundation bolts for 3 Nos. 30 HP water Pumps, 02 Nos. 5 HP Priming Pump and the electrical panels with Rewiring work & Lighting at appropriate locations inside of CNP AC Plant Pump House.

2. Provision through fabrication of suitable angle iron frame structure of adequate capacity as recommended by the pump set manufactures for mounting of 3 Nos. 30 HP water Pumps and 02 Nos. 5 HP Priming Pump. On the foundation arrangement.

3. Erecting of angle iron frame structures through the foundation bolts on the constructed foundation arrangement along with proper alignments.

4. Erecting of 3 Nos. 30 HP water pump and 02 Nos. 5 HP priming Pump by fixing on angle iron frame structure through the mounting bolts with proper alignments of Pump & motor.

5. Installing of flange coupling on pump & motor shaft with proper alignment and fixing of flange guard in appropriate manner as directed by the Site In charge.

6. Supply & Installation of MS Suction pipe line along with supply & installation of foot valve & Interconnection of MS suction pipe lines of 200mm (Approx.) Size from CNP Underground Sump to inlets of the 03 Nos. 30 HP water pumps to be installed.

7. Installation & interconnection of delivery pipe lines of 150mm (Approx.) 3 Nos. 30 HP water Pump to existing delivery pipe lines of CNP.

8. The delivery pipe lines are to be connected to the existing pipe line feeding CNP AC Plant through existing Pipe line arrangement of 3X30 HP water pumps. Hence, required addition/ alteration/ modification in the pipe lines will be considered & provided appropriately.

9. Installation of all required control valve, pipes & accessories on suction & delivery pipe lines of 3 Nos. 30 HP water Pumps either by flange jointing or by seam welding as per site requirements.

10. Installation of Dial type pressure gauges with pipe line connection, at least 1 per pump set, at suitable locations.

11. Installation of suction & delivery pipe lines with all required accessories inclusive of the supply part of the accessories and all required control valve for 02 Nos. 5 HP Priming Pump.

12. The priming pump will be installed appropriately with suitable control valve arrangement so that same priming pump can fulfill the requirement of at least 02 nos. of the 30 HP Pump sets.

13. Supply & Installation of air pressure surge release arrangement in appropriate manner as directed by the Site In charge. The air surge unit shall be properly Installed so as to remove air from the pipe line at every start and to minimize water hammer effect in the pipe at every stop of the pump due to power failures/tripping on faults.

14. The installation of pipe line work is involved with jointing of pipes by appropriate method of welding and installing of different type valves with special leak proof gaskets/sealant and hexagonal head nut bolts of ISI marked make with recommended tightening torque.

15. Provision of masonry supports/MS Clamp supports wherever felt essential for all suction & delivery pipe lines to prevent pipe lines from damage/deflection due to working pressure of the pumps.

16. Installation Testing and Commissioning of MCC Panel Board along with necessary civil works for grouting of panel board.

17. Supply & Installation of suitable cable Tray of approx. size of 200mm for laying of motor cables & earthing conductors of 03 Nos. 30 HP pumps & 02 Nos. 5 HP Priming Pump from MCC Panel Board to the motors terminal connection plates including provision of suitable MS Angle iron structures to hold the raising cable from ground to the heighted motor terminal plates.

18. Laying & termination of all incoming electric cables in to the MCC Panel Board through cable trench with clamping of the cable on the walls of the trench by means of suitable MS clamps.

19. Termination of existing incomer cable, into new MCC panel with correct size of cable glands and copper cable end lugs.

20. In case the length of the existing cable(s) are found short then bidder shall have to extend the same by jointing additional cable piece of same size through straight through joint kit of reputed make like Raychem/3M or equivalent make.

21. Laying of outgoing electric cables from individual motor controller in the MCC Panel Board to individual motor connection plate/box of the pump sets through cable trench with clamping of the cable on the walls of the trench by means of suitable MS clamps.

22. Termination of all outgoing electric control cables in to the MCC Panel Board and motor connection plate/box with correct size of brass cable gland and copper cable end lugs.

23. Laying & termination of all double earthing conductors from Earthing Pit to the MCC Panel Board and Pump Sets through cable trench with clamping of the conductors on the walls of the trench by means of suitable MS clamps.

24. Provision of cable trench covers plates with collapsible handles as directed by the Site In charge.

25. The metallic body of Pump, Motor, MCC panel and other equipment shall be double earthed through recommended earthing conductor i.e. Size 8 SWG, GI, Solid round conductor/equivalent.

26. The electrical insulation rubber mat of 1.1 KV grade shall be placed all around the MCC Panel Board as a safety provision Quantity as per MCC Panel Board size.

27. Supply & Installation of LED Batten Lights of 40W (Approx.) with complete rewiring work & provision of 5/16Amp 1Ph & 32Amp 3Ph Power Points at Appropriate location inside of CNP Pump House.

28. DISMANTLING OLD PUMP INSTALLATION The job involves complete dismantling, materials handling & shifting works as below: Existing Pumps, Motors, Suction, Delivery and Priming Pipe Lines and Control Valves: Complete LOT MCC PDB Electrical Panel Board: 1 Set. Resurfacing of damaged floor surface and wall surface shifting of entire lot of dismantled materials in scrap yard as directed.

SECURITY PRINTING AND MINTING CORPORATION OF INDIA LIMITED

TENDER NO: 6000019069

General Technical Specifications

Part- I CNP MAIN PUMP HOUSE

1. Supply of 02 nos. water pump of 40 HP Existing Pump Type 4UP3 (Make : Kirloskar/Cromton Greaves/KSB/grundfos) horizontal flange mounted, self-aligned, split case, single-stage centrifugal pump of speed : 1450 RPM, Flanges : Suction 200 mm Diameter, Delivery : 150 mm diameter with horizontal axially split volute type casing made from cast iron. Suction and discharge nozzles and supporting feet are cast integral with lower half casing. Impeller: suction type accurately balanced (Material of construction of impeller: CF8M Stainless steel). Shaft: The high tensile Carbon steel/ stainless steel shaft accurately machined and ground supported by anti-friction bearings.

2. Supply of 02 nos. electric motors (drive) of 40 HP capacity, 3 Phase, 415 V, 50 Hz (Make : (Kirloskar/crompton greaves/Simens/ABB) for the operation of the water pumps. Energy efficient as per applicable IS/IE/IEC standards, Three-phase squirrel cage induction motor, inverter grade, super enameled copper winding, Class F insulation with Class B temperature rise limit, horizontal foot mounted, extended shaft design, fan cooled, IP55 protection Shaft design matching the pump.

3. Fitting of pump set coupling (ISI marked) for the coupling of the 40 HP water pumps and electric motors. The coupling fasteners will be heavy duty, hexagonal headed bolts as per size and quantity recommended by the coupling manufacturer. The flange hole drilling will be as per applicable IS standards. (Make : Kirloskar or equivalent)

4. Supply of 02 Nos of foundation frame with bolts for the pumps and electric motors. The foundation frame will be fabricated, painted with anti-rust coating & synthetic oil paint. The foundation structure to be fabricated as per installation guidelines of the pump/motor manufacturer. Heavy duty hexagonal bolts as per the recommendation of the pump and motor manufacturer to be used. (Make : Kirloskar or equivalent).

5. Supply of 02 nos. Energy efficient 5 HP capacity Monoblock Self-priming centrifugal vacuum pump sets suitable for priming operation of the 02 nos. 40 HP capacity water pumps. The vacuum pump will have suitable capacity with appropriate size inlet and outlet pipe connection arrangement. The vacuum pump will be coupled & driven by three phase squirrel caged induction motor with super enameled copper winding, class F insulation. The shaft diameter will match that of the pump. The motor will be fan cooled with IP55 protection. The

capacity of the priming pump motor will be Energy efficient 5 HP, 3-phase, 415 V. Make of Pump will be (Make : Kirloskar/Cromton Greaves/KSB/grundfos) Make of the motor will be(Kirloskar/crompton greaves/Simens/ABB)

6. Supply of 250 mm (Approx.) Suction pipeline Heavy Duty MS pipe and fittings in required quantities for completion of work, i.e., Tees, unions, elbows, Bends, crosses, bushings, sockets, Nipples, flanges and joints as per the site condition conforming and marked to applicable IS standards. Firm has to lay the suction pipe line from CNP underground Sump to newly installed 40HP Pumps Firm has to supply & Install the 250mm (Approx) foot valves for the suction pipe line inside of CNP Pump house Sump.

7. Supply of 32 mm diameter priming pipeline made of Galvanised iron (GI) (ISI marked) medium duty Class B with fittings in required quantities such as Tees, unions, elbows, Bends, crosses, bushings, sockets, Nipples, flanges etc conforming and marked to applicable IS standards. This 32mm Pipe line will be used for 02 Nos of 5Hp Priming Pump sets.

8. Supply of 02 nos. delivery valve Heavy duty Class B, PN1.6 non rising spindle gate sluice valve with flanged end connection made of cast iron for 200 mm diameter pipeline and conforming and marked to applicable IS standards. Make : Kirloskar, or ISI Marked equivalent

9. Supply of 02 nos. non-return valve Heavy Duty Class B,PN 1.6 swing check type reflex non-return valve with flanged end connection PN1.6 made of cast iron for 200 mm diameter pipeline and conforming and marked to applicable IS standards. Make : Kirloskar or ISI Marked equivalent

10. Supply of 02 nos. priming line valves Heavy duty Class B, swing check type reflex non-return valve with flanged end connection made of brass metal (Make : ISI marked).

11. Supply of 01 No. of motor control center panel board - Cubicle panel board, 1.1 kV rated, Indoor type, standalone, compartmentalized, manufactured with CRC Sheet of 16 SWG for outer body and 18 SWG for compartments, Cubicle panel board,1.1 KV rated, Indoor type, Standalone, Compartmentalized, manufactured with MS Sheet of 16 SWG for outer body & 18 SWG for compartments, Copper bus bars of adequate capacity insulated with heat shrinkable insulation sleeves in proper colour codes & sufficient bus bar insulators with adequate capacity, MS C channel of size 100 mm at base, detachable cable entry plates at bottom, Cable routing compartment with melamine bolted connectors of 100 Amp. Rating at one side. The PDB shall be installed with following switchgears & Control gears:-

A) Incomer:

1. Moulded case circuit breaker (MCCB)(with Rotary Handle) Rating: 400 Amp, Number of Pole: Four pole; With Rotary Operating Handle Mechanism & Necessary Indication.

Ue: 415 V AC, 50/60 Hz,

Working voltage- 415/440volts AC 50/60 Hz Icu At 380-415V AC: 36 KA

Standard: as per latest IS or IEC standard. Indication/metering:

Necessary Indication and digital Multifunction meter.

Quantity: 01 Nos.

B) Outgoing

1. Moulded case circuit breaker Rating: 250 Amp, Number of Pole: Four pole, With Rotary Operating Handle Mechanism. Ue : 415 V AC, 50/60 Hz, Working voltage- 415/440volts AC 50/60 Hz Icu At 380-415V AC: 36KA Standard: as per Latest IS or IEC Indication/metering: Necessary Indication and Analog Ammeter & Voltmeter.+ Multifunction meter for Energy consumed measurement .

Quantity: 04 Nos.

2. Moulded case circuit breaker Rating: 63 Amp, Number of Pole: Four pole, With Rotary Operating Handle Mechanism Ue: 415 V AC, 50/60 Hz, Working voltage- 415/440volts AC 50/60 Hz Icu At 380-415V AC: 36 KA Standard: as per Latest IS or IEC Indication/metering: Necessary Indication & Digital Multifunction meter.

Quantity: 04 Nos.

C) Motor starter shall be FCMA or VFD. For FCMA Type Motor Starter, FCMA LT Soft Starter Automatic Open Execution FCMA Soft Starter complete with Flux Compensated Magnetic Amplifier Module, Bypass Contactor to be connected between Main Switching Contactor (C1) & Motor.

i. The soft starter for 02 Nos of 40 HP Pump shall work on the principles of Flux Compensating Magnetic Amplifier [FCMA] Technology. It should follow the applicable IS standards for the design of current limiting reactors.

ii. The soft starter Module shall be designed for supply voltage variation of +10 % & Frequency variation of + 5%.

iii. The soft starter OE Module shall be rated corresponding to the Motor power & shall be capable of operating satisfactorily with the motor starting condition of the motor over the entire operating range.

iv. The soft starter OE Module rating offered shall not be less than the rated kW of the motor.

v. Soft starter should not overheat and temperature rise should be within temperature limit as specified by class B & as per applicable IS/IEC standards.

vi. The soft starter OE Module shall control the starting torque in such a manner so as to effect smooth starting of the motor drive.

vii. The soft starter OE Module shall have the built in facility to bypass the FCMA reactor near to full speed of the motor by suitable contactor, so that the voltage to the motor is equal to the supply voltage.

viii. The soft starter OE Module shall be so rated as to allow at least 3 starts equi-spaced per hour or two hotstarts.

ix. The reactor of LT soft starter shall be Innovative Technomic's or equivalent make Iron Core design working methodology for smooth linear acceleration and high efficiency, natural air cooled meeting applicable IS standards and shall not lead to generation of Harmonics and humming noise during starting process.

x. FCMA Open Execution soft starter should be only Iron core Reactor Module with mounting arrangements at bottom side and bypass contactor, Timers and auxiliary contactors fitted aside of reactor module over its extended fibre portion of bobbins. This whole assembly is suitable to fit into the MCC/PCC panel of contactor.

xi. The Panel height from the floor of the proposed location should be same as the pump foundation height with provision of staircase if required for operation. The clearance of the panel from the wall will be at least 1.5 metre for ease of maintenance work.

xii. The main power supply from MCCB/Main Line contactor is given to the FCMA OE reactor Module and then to the motor. The bypass contactor is connected across the FCMA Windings for bypass.

xiii. The LT soft starter should be suitable for up to 50 degree Ambient Temperature and altitude up to 1000 m.

D) Panel should have the following features:

1) Pump ON/OFF with emergency Stop.

2) Over Current, Under Current, Dry running, Pump Stall Protection.

E) Digital Multi meter with Control Fuses for Main incomer .

F) Ammeter & Voltmeter for outlet feeders of 250A & 63A.

G) Digital Energy Meter with CTs & control fuses at main incomers

H) Hours meter on 40HP pump feeder.

I) LED indicators for Supply Status, i.e, R Y B

J) LED indicators for Pump Status i.e. OFF, ON, TRIP, BYPASS etc. for each pump.

K) Push buttons for pump ON/OFF/TRIP for each pump.

L) Panel Cooling fans : 02 Nos. instrument cooling fans, 250V

M) Marking & labeling radium stickers as directed.

O) Door operated panel illuminating LED lamp : 10W, 250V B22 LED Luminaries

P) Panel Space heaters with automatic control through thermostat. The general scheme of the MCC panel will be suitable for termination of incomer supply sources through cable from bottom entry.

The MCCBs, Pump Controllers and Pump Cable Connectors of each outlet feeder shall be separated from each other through compartmentalized feature of MCC Panel Board. There shall be spacious cable connection compartments with cable entry cutouts suitable for all incoming & outgoing cables.

Make of Switchgear: L & T/Siemens/ABB or equivalent

Make of FCMA Starter: Innovative Technomic's / Juvik Solutions or equivalent.

12. Supply of 01 Nos. Changeover Switch 400Amp rating for MSEB to DG supply – The changeover switch should be provided in the MCC panel, 400 Amp, Four Pole With Rotary Operating Handle Mechanism Ue: 415 V AC, 50/60 Hz, Working voltage- 415/440volts AC 50/60 Hz, Standard: as per Latest IS or IEC Indication: Necessary Indication for Substation II / Feeder panel Supply.

Quantity: 01 Nos.

Firm has to terminate both Substation II / Feeder panel cable at Changeover switch with Cable Gland & Lugs of Appropriate Size.

13. Supply, Installation & Laying of Electric cable of 4 core XLPE Aluminium armoured 240 Sq.MM from outdoor Feeder panel near old training hall to CNP Pump House Main Motor control Panel change over switch, length of cable 100 Mtr. Approx. if any additional cable is required based on location of Motor control panel bidder has to supply the same at No cost to CNP. XLPE insulated Armored, Multi stranded Aluminium conductors, IS7098 Heavy duty Industrial Cable for Voltage Grade up to 1100 volts as per applicable IS standards Size 4 core X 240 sq. mm. nominal area of each core conductor Voltage 415+/-10 Freq. 50 Hz Ac supply system. Make : Polycab or equivalent

14. Supply, Installation & Laying of 25 Sq.MM copper cable from CNP Pump House Main Motor control Panel to 02 Nos of 40HP Pump Motors. Length of cable 60 Mtr. Approx.in 02 Runs - if any additional cable is required based on location of Motor control panel bidder has to supply the same at No cost to CNP. PVC insulated Flexible, Multi stranded Copper conductors, as per applicable IS Standard Heavy duty Industrial Cable for Voltage Grade up to 1100 volts as per applicable IS standards Size 03 core X 25 sq. mm. nominal area of each core conductor Voltage 415+/-10 Freq. 50 Hz Ac supply system. Make : Polycab or equivalent

15. Supply, Installation & Laying of Electric 04 Sq.MM copper cable from CNP Pump House Main Motor control Panel to 02 Nos of 05HP Pump Motors. length of cable 60 Mtr. Approx.in 02 Runs - if any additional cable is required based on location of Motor control panel bidder has to supply the same at No cost to CNP. PVC insulated Flexible, Multi stranded Copper conductors, as per applicable IS Standard Heavy duty Industrial Cable for Voltage Grade up to 1100 volts as per applicable IS standards Size 03 core X 04 sq. mm. nominal area of each core conductor Voltage 415+/-10 Freq. 50 Hz Ac supply system. Make : Polycab or equivalent

16. Supply of Complete Motorised Chain Hoist & Girder, 2 Ton capacity.= 02 Nos. The scope of work involves design & supply & Installation of Motorised Chain hoist arrangement of 2TON capacity suitable for handling of pump set during installation/dismantling for repairs; b) MS girder of suitable size, shape, length of MS Girder for mounting & movement/travel of chain hoist ; c) Chain arrangement with lifting hook ; d) The two set of chain hoist shall be installed at two different pump in the premises of same pump house. Make – ISI Marked

17. Maintenance Free Earthing system & Earthing Conductor for complete system installation Provision of Maintenance free Ultra low resistance High conductivity Type Earthing system Back-fill compound strictly be a Activated Carbon based conductive type which has a resistivity of less than 0.12 Ohm Mtr. as per applicable ISI/IEEE standard.

A) CPRI Tested Earth Electrode :

• High tensile low carbon steel rod of 3 Mts length & 32 mm dia with 250 micron (average) molecularly bonded copper on the outer surface.

• Manufacturer name should be embossed on the rod, Shall be tested at CPRI for short current time rating of 55KA rms for 1 sec (3 mtr electrode).

• Make – Indelec or equivalent

• Qty :- 02 Nos.

B) Activated Carbon Based Grounding Compound:-

• Back-fill compound strictly be a Activated Carbon based conductive type which has a resistivity of less than 0.12 Ohm Mtr as per applicable IEEE standards.Tested as per applicable IEC standards and the test certificates shall be submitted with Tender.

• Shall not depend on the continuous presence of water / moisture / salt to maintain its conductivity. Shall contain a corrosion inhibitor to prevent corrosion of copper Shall not contain hazardous chemicals and necessary Test certificate from reputed accredited laboratories shall be furnished.

•Back-fill compound should be electronically conductive (Like in metals) and should not depend on moisture for conduction. Compound shall be supplied in 50 Pound Bag. (2 Bag = 23Kg required per earthing set).

•Make – Indelec or equivalent

C) Supply, Installation & Laying of 25x3mm electrolytic grade copper conductor

Material – Copper electrolytic Grade

Qty = 100 Mtr.

18. Supply & Installation of 01 No. of air pressure surge release arrangement in appropriate manner as directed by the Site In charge. The air surge unit shall be properly Installed so as to remove air from the pipe line at every start and to

minimize water hammer effect in the pipe at every stop of the pump due to power failures/tripping on faults.

19. Installation, Testing, Commissioning : Civil Works/Mechanical Works/Electrical Works The job involves complete installation, commissioning & testing activities of all the pumps, motor, pipeline control valves, cables, wires, Earthing, trenches, cover plates, pipe clamps, pie support etc., including materials handling, fabrication, drilling, tapping, welding, excavation, resurfacing, masonry concrete work, RCC foundation work etc. along with any unforeseen/additional requirement but felt essential for functioning of the water pumps shall also be included under this service activity

20. DISMANTLING OLD PUMP INSTALLATION The job involves complete dismantling, materials handling & shifting works as below: Existing Pumps, Motors, Suction, Delivery and Priming Pipe Lines and Control Valves: Complete LOT MCC PDB Electrical Panel Board: 1 Set. Resurfacing of damaged floor surface and wall surface shifting of entire lot of dismantled materials in scrap yard as directed.

Part- II CNP AC PLANT PUMP HOUSE

1. Supply of 03 nos. water pump of 30 HP Existing Model – 4UP3 of((Make : Kirloskar/Cromton Greaves/KSB/grundfos), Horizontal flange mounted, self-aligned, split case, single-stage centrifugal pump of speed: 1450 RPM, Flanges: Suction 150 mm Diameter, Delivery: 100 mm diameter with horizontal axially split volute type casing made from cast iron. Suction and discharge nozzles and supporting feet are cast integral with lower half casing. Impeller: suction type accurately balanced (Material of construction of impeller: CF8M Stainless steel). Shaft: The high tensile Carbon steel/ stainless steel shaft accurately machined and ground supported by anti-friction bearings.

2. Supply of 03 nos. electric motor (drive) of 30 HP capacity, 3 Phase, 415 V, 50 Hz Make: (Kirloskar/crompton greaves/Simens/ABB) For the operation of the water pumps. Energy efficient as per applicable IS/IE/IEC standards, Three-phase squirrel cage induction motor, inverter grade, super enameled copper winding, Class F insulation with Class B temperature rise limit, horizontal foot mounted, extended shaft design, fan cooled, IP55 protection Shaft design matching the pump.

3. Fitting of pump set coupling (ISI marked) for the coupling of the 30 HP water pumps and electric motors. The coupling fasteners will be heavy duty, hexagonal headed bolts as per size and quantity recommended by the coupling

manufacturer. The flange hole drilling will be as per applicable IS standards. (Make: Kirloskar or equivalent)

4. Supply of foundation frame with bolts for the pumps and electric motors. The foundation frame will be fabricated, painted with anti-rust coating & synthetic oil paint. The foundation structure to be fabricated as per installation guidelines of the pump/motor manufacturer. Heavy duty hexagonal bolts as per the recommendation of the pump and motor manufacturer to be used. (Make : Kirloskar or equivalent)

5. Supply of 02 nos. 5 HP capacity Monoblock Self-priming centrifugal vacuum pump sets suitable for priming operation of the 03 nos. 30 HP capacity water pumps. The vacuum pump will have suitable capacity with appropriate size inlet and outlet pipe connection arrangement. The vacuum pump will be coupled & driven by Energy efficient three phase squirrel caged induction motor with super enameled copper winding, class F insulation. The shaft diameter will match that of the pump. The motor will be fan cooled with IP55 protection. The capacity of the priming pump motor will be 5 HP, 3-phase, 415 V. Make of Pump will be Kirloskar or equivalent. Make of the motor will be Kirloskar or equivalent.

6. Supply of 150 mm (Approx.) Suction pipeline Heavy Duty MS pipe and fittings in required quantities for completion of work, i.e., Tees, unions, elbows, Bends, crosses, bushings, sockets, Nipples, flanges and joints as per the site condition conforming and marked to applicable IS standards. Firm has to lay the suction pipe line from CNP underground Sump to newly installed 30HP Pumps. Firm has to supply & Install the 200mm (Approx.) foot valves for the suction pipe line inside of CNP Pump house Sump.

7. Supply of 32 mm diameter priming pipeline made of Galvanized iron (GI) (ISI marked) medium duty Class B with fittings in required quantities such as Tees, unions, elbows, Bends, crosses, bushings, sockets, Nipples, flanges etc. conforming and marked to applicable IS standards. This 32mm Pipe line will be used for 02 Nos of 5Hp Priming Pump sets.

8. Supply of 03 nos. delivery valve Heavy duty Class B, PN1.6 non rising spindle gate sluice valve with flanged end connection made of cast iron for 150 mm diameter pipeline and conforming and marked to applicable IS standards. Make: Kirloskar, or ISI Marked equivalent

9. Supply of 03 nos. non-return valve Heavy Duty Class B,PN 1.6 swing check type reflex non-return valve with flanged end connection PN1.6 made of cast

iron for 150 mm diameter pipeline and conforming and marked to applicable IS standards. Make: Kirloskar or ISI Marked equivalent

10. Supply of 02 nos. priming line valves Heavy duty Class B, swing check type reflex non-return valve with flanged end connection made of brass metal (Make : ISI marked).

11. Supply of motor control central panel board: Cubicle panel board, 1.1 kV rated, Indoor type, standalone, compartmentalized, manufactured with CRC Sheet of 16 SWG for outer body and 18 SWG for compartments, Cubicle panel board,1.1 KV rated, Indoor type, Standalone, Compartmentalized, manufactured with MS Sheet of 16 SWG for outer body & 18 SWG for compartments, Copper bus bars of adequate capacity insulated with heat shrinkable insulation sleeves in proper colour codes & sufficient bus bar insulators with adequate capacity, MS C channel of size 100 mm at base, detachable cable entry plates at bottom, Cable routing compartment. The PDB shall be installed with following switchgears & Control gears:-

A) Incomer:

1. Molded case circuit breaker (MCCB)(with Rotary Handle)

Rating: 250 Amp, Number of Pole: Four pole; With Rotary Operating Handle Mechanism & Necessary Indication.

Ue: 415 V AC, 50/60 Hz,

Working voltage- 415/440volts AC 50/60 Hz Icu At 380-415V AC: 36 KA

Standard: as per latest IS or IEC standard. Indication/metering:

Necessary Indication and digital Multimeter.

Quantity: 01 Nos.

B) Outgoing

1. Molded case circuit breaker Rating: 125 Amp, Number of Pole: Four pole, With Rotary Operating Handle Mechanism. Ue : 415 V AC, 50/60 Hz, Working voltage- 415/440volts AC 50/60 Hz Icu At 380-415V AC: 36KA Standard: as per Latest IS or IEC Indication/metering: Necessary Indication and Ammeter & Voltmeter.

Quantity: 04 Nos.

2. Moulded case circuit breaker Rating: 32 Amp, Number of Pole: Four pole, With Rotary Operating Handle Mechanism Ue: 415 V AC, 50/60 Hz, Working voltage- 415/440volts AC 50/60 Hz Icu At 380-415V AC: 36 KA Standard: as per Latest IS or IEC Indication/metering: Necessary Indication and Ammeter & Voltmeter.

Quantity: 04 Nos.

C) Motor starter shall be FCMA or VFD. For FCMA LT Soft Starter Automatic Open Execution FCMA Soft Starter complete with Flux Compensated Magnetic Amplifier Module, Bypass Contactor to be connected between Main Switching Contactor (C1) & Motor.

i. The soft starters for 03 Nos of 30 HP Pump shall work on the principles of Flux Compensating Magnetic Amplifier [FCMA] Technology. It should follow the applicable IS standards for the design of current limiting reactors.

ii. The soft starter Module shall be designed for supply voltage variation of +10 % & Frequency variation of + 5%.

iii. The soft starter OE Module shall be rated corresponding to the Motor power & shall be capable of operating satisfactorily with the motor starting condition of the motor over the entire operating range.

iv. The soft starter OE Module rating offered shall not be less than the rated kW of the motor.

v. Soft starter should not overheat and temperature rise should be within temperature limit as specified by class B & as per applicable IS/IEC standards.

vi. The soft starter OE Module shall control the starting torque in such a manner so as to effect smooth starting of the motor drive.

vii. The soft starter OE Module shall have the built in facility to bypass the FCMA reactor near to full speed of the motor by suitable contactor, so that the voltage to the motor is equal to the supply voltage.

viii. The soft starter OE Module shall be so rated as to allow at least 3 starts equispaced per hour or two hotstarts.

ix. The reactor of LT soft starter shall be Innovative Technomic's or equivalent make Iron Core design working methodology for smooth linear acceleration and high efficiency, natural air cooled meeting applicable IS standards and shall not lead to generation of Harmonics and humming noise during starting process.

x. FCMA Open Execution soft starter should be only Iron core Reactor Module with mounting arrangements at bottom side and bypass contactor, Timers and auxiliary contactors fitted aside of reactor module over its extended fiber portion of bobbins. This whole assembly is suitable to fit into the MCC/PCC panel of contactor.

xi. The Panel height from the floor of the proposed location should be same as the pump foundation height with provision of staircase if required for operation. The clearance of the panel from the wall will be at least 1.5 metre for ease of maintenance work.

xii. The main power supply from MCCB/Main Line contactor is given to the FCMA OE reactor Module and then to the motor. The bypass contactor is connected across the FCMA Windings for bypass.

xiii. The LT soft starter should be suitable for up to 50 degree Ambient Temperature and altitude up to 1000 m.

D) Panel should have the following features:

1) Pump ON/OFF with emergency Stop.

2) Over Current, Under Current, Dry running, Pump Stall Protection.

E) Digital Multifunction meter with Control Fuses for Main incomer

F) Ammeter & Voltmeter with for outlet feeders of 125A & 32A

G) Digital Energy Meter with CTs & control fuses at main incomers

H) Hours meter on 30HP pump feeder.

I) LED indicators for Supply Status, i.e., R Y B

J) LED indicators for Pump Status i.e. OFF, ON, TRIP, BYPASS etc. for each pump.

K) Push buttons for pump ON/OFF/TRIP for each pump.

L) Panel Cooling fans: 02 Nos. instrument cooling fans, 250V

M) Marking & labeling radium stickers as directed.

N) Door operated panel illuminating LED lamp: 10W, 250V B22 LED Luminaries

O) Panel Space heaters with automatic control through thermostat. The general scheme of the MCC panel will be suitable for termination of incomer supply sources through cable from bottom entry.

The MCCBs, Pump Controllers and Pump Cable Connectors of each outlet feeder shall be separated from each other through compartmentalized feature of MCC Panel Board. There shall be spacious cable connection compartments with cable entry cutouts suitable for all incoming & outgoing cables.

Make of Switchgear: L & T/Siemens/ABB or equivalent

Make of FCMA Starter: Innovative Technomic's / Juvik Solutions or equivalent

12. Supply, Installation & Laying of Electric 16 Sq.MM armoured copper cable from CNP AC Plant Pump House Main Motor control Panel to 03 Nos of 30HP Pump Motors. Length of cable 60 Mtr. Approx.in 02 Runs - if any additional cable is required based on location of Motor control panel bidder has to supply the same at No cost to CNP. PVC insulated Flexible, Multi stranded Copper conductors, as per applicable IS Standard Heavy duty Industrial Cable for Voltage Grade up to 1100 volts as per applicable IS standards Size 03 core X 16 sq. mm. nominal area of each core conductor Voltage 415+/-10 Freq. 50 Hz Ac supply system. Make : Polycab or equivalent

13. Supply, Installation & Laying of Electric 04 Sq.MM armoured copper cable from CNP AC Plant Pump House Main Motor control Panel to 02 Nos of 05HP Pump Motors. length of cable 30 Mtr. Approx.in 02 Runs - if any additional cable is required based on location of Motor control panel bidder has to supply the same at No cost to CNP.

PVC insulated Flexible, Multi stranded Copper conductors, as per applicable IS Standard Heavy duty Industrial Cable for Voltage Grade up to 1100 volts as per applicable IS standards Size 03 core X 04 sq. mm. nominal area of each core conductor Voltage 415+/-10 Freq. 50 Hz Ac supply system.

Make : Polycab or equivalent

14. Maintenance Free Earthing system & Earthing Conductor for complete system installation Provision of Maintenance free Ultralow resistance High conductivity Type Earthing system Back-fill compound strictly be a Activated Carbon based conductive type which has a resistivity of less than 0.12 Ohm Mtr. as per applicable ISI/IEEE standard.

A) CPRI Tested Earth Electrode:

• High tensile low carbon steel rod of 3 Mts length & 32 mm dia with 250 micron (average) molecularly bonded copper on the outer surface.

• Manufacturer name should be embossed on the rod, Shall be tested at CPRI for short current time rating of 55KA rms for 1 sec (3 mtr electrode).

• Make – Indelec or equivalent

• Qty :- 02 Nos.

B) Activated Carbon Based Grounding Compound:-

• Back-fill compound strictly be a Activated Carbon based conductive type which has a resistivity of less than 0.12 Ohm Mtr as per applicable IEEE standards. Tested as per applicable IEC standards and the test certificates shall be submitted with Tender.

• Shall not depend on the continuous presence of water / moisture / salt to maintain its conductivity. Shall contain a corrosion inhibitor to prevent corrosion of copper Shall not contain hazardous chemicals and necessary Test certificate from reputed accredited laboratories shall be furnished.

•Back-fill compound should be electronically conductive (Like in metals) and should not depend on moisture for conduction. Compound shall be supplied in 50 Pound Bag. (2 Bag = 23Kg required per earthing set).

•Make – Indelec or equivalent

C)Supply, Installation & Laying of 25x3mm electrolytic grade copper conductor

Material – Copper electrolytic Grade

Qty = 60 Mtr.

15. Supply of 01 No. of air pressure surge release arrangement in appropriate manner as directed by the Site In charge. The air surge unit shall be properly Installed so as to remove air from the pipe line at every start and to minimize water hammer effect in the pipe at every stop of the pump due to power failures/tripping on faults.

16. Installation, Testing, Commissioning : Civil Works/Mechanical Works/Electrical Works The job involves complete installation, commissioning & testing activities of all the pumps, motor, pipeline control valves, cables, wires, Earthing, trenches, cover plates, pipe clamps, pie support etc., including materials handling, fabrication, drilling, tapping, welding, excavation,

resurfacing, masonry concrete work, RCC foundation work etc. along with any unforeseen/additional requirement but felt essential for functioning of the water pumps shall also be included under this service activity

17. DISMANTLING OLD PUMP INSTALLATION the job involves complete dismantling, materials handling & shifting works as below: Existing Pumps, Motors, Suction, Delivery and Priming Pipe Lines and Control Valves: Complete LOT MCC PDB Electrical Panel Board: 1 Set. Resurfacing of damaged floor surface and wall surface shifting of entire lot of dismantled materials in scrap yard as directed.

General Terms & Conditions

1. The firm will have to carry out the entire job on turnkey basis.

2. All types of material handling activities like shifting of scrap material to scrap yard, unloading & shifting of new pumps & motors along with its accessories to the installation site etc. are in the scope of the firm.

3. All the types of tools and tackles like forklift, Chain pulley blocks, gas cutting & arc cutting equipment, ladders etc. will have to be arranged by the firm for the dismantling, shifting, unloading & installation work etc.

4. All kind of works including Civil, Electrical, Mechanical, Plumbing, welding, drilling, etc. required for installation of equipment/components are in the scope of firm

5. Necessary shutdown of Plant, if required, shall be given to the firm on Sundays/holidays for Piping related connections.

6. The firm under this contract commits himself to use the first class material and assume responsibility for the quality of all the materials incorporated or brought for incorporation in the work.

7. In case of any defective equipment or material or workmanship, the firm shall rectify/modify/replace the defective item free of cost. Any delay on the part of firm in doing so gives the CNP the right to get the defect rectifies through other agency & cost for the same shall be borne by the firm.

8. After successful installation & testing of water pumps, the firm will have to provide 15 days operational/performance trial of pumps and submit its report to the CNP.

9. Firm should attach the detailed product catalogue, Technical Data sheet for Pumps, Motors, Cables, FCMA Starter etc.

10. Firm should have valid Electrical Contractor License issued by competent authority.

11. Firm should provide the Authorization from Manufacturer for Pump, Motor, FCMA Panel & Switchgear, and Cables as per the format of SPMCIL Tender document.

12. Warranty Clause: The Warranty will remain valid for a period of minimum 12 Months from the date of successful installation, testing, commissioning & acceptance at site.

13. The firm should submit three sets of copies of design, drawings, data sheets, calculations, and test report/certificate, operation & maintenance manuals including 'as built drawing' & Bill of material etc. to the CNP.

14. Firm will have to submit valid PVR (Police Verification Report) certificates of their engineer/supervisor/workmen for entry in CNP for the work.

15. The firm to whom the job work has been assigned will ensure and monitor the work.

16. Firm shall follow all safety & security norms in CNP. A Safety Code will be handed over to the firm. If any damage occurs to the property of CNP due to any accident during the execution of work, the same to be compensated by the supplier. Any damage to the manpower employed by the supplier due to any accident is the entire responsibility of the supplier.

17. The firm has to nominate one of the competent supervisor, who in addition to his duty will also be responsible to look after the safety of employees working under them and safety of nearby other plant equipment. The name, address and mobile number should be informed to the safety department CNP, before commencement of the work.

18. The contractor will provide personal protective equipment to his employees to ensure their safety.

19. All the machines brought by contractor for their job work should be properly guarded/maintained in proper condition for their safe working

20.For working at height, welding work, gas cutting work, excavation work, working on fragile roof, working on electrical lines or work of similar nature, the firm and their contractor will inform the Safety & Fire department of CNP in advance and in each case work permit will be obtained by the firm from the Safety & Fire department.

21. The firm has to confirm that above work will be completed without hampering the existing plant water supply.

22. In case of any accident, the firm representative will arrange to inform it to the safety department of CNP immediately. The agency will also arrange to inform the Inspector of Factories Nashik

23. Quantity Variation: The above quantities are approximate only. The actual quantities may vary (up to +/- 5%) depending upon site requirement while execution of work. Payment will be made as per actual work done quantity only.

Section VIII: Quality Control Requirements

The quality control requirement shall be in line with section VII: Technical specification.

SECURITY PRINTING AND MINTING CORPORATION OF INDIA LIMITED

TENDER NO: 6000019069

Section IX: Qualification / Eligibility Criteria

The following shall be the minimum eligibility criteria for selection of bidders:

1. **Experience and past performance**:

The bidder should have experience of having successfully completed similar type of works during last 7 years ending 31.03.2024.

1. Three similar completed works each costing not less than the amount equal to Rs. 77,69,000/- or
2. Two similar completed works each costing not less than the amount equal to Rs. 97,12,000/-.or
3. One similar completed work costing not less than the amount equal to Rs. 1,55,38,000/-.

2. Capacity and Capability Criteria:

The bidder should be enlisted in either Central Public Works Department (CPWD) or Military Engineering Services (MES) or any other Government/PSU/Autonomous bodies.

3. **Financial Standing**:

(a) Average Annual turnover of the bidder firm during the last three financial years i.e. 2021-2022, 2022-2023 & 2023-24 should be more than Rs. 77,69,000/-.

(b) The net worth of the firm should not be negative of FY 2023-2024 and should not have eroded by more than 30% in the last three financial years i.e. 2021-2022, 2022-2023 & 2023-24.

4. The bidder should submit Power of Attorney of the Authorized Signatory for signing the bid, entering in to contract, if awarded and for any other correspondences.

5. The bidders shall enclose copy of GST Registration (in Reg-06) & copy of PAN.

6. The bidder should give undertaking/declaration that they have read and understood all the terms & conditions of tender documents and submitting unconditional acceptance to all terms & conditions.

7. The bidder should give a declaration that they have not been black-listed/ debarred for dealing by Government of India in the past.

8. Note:-

(i) In support of experience & capability criteria, the bidder has to submit attested copies of P.O's, Experience certificates issue by customers.
(ii) All experience, past performance & capacity/ capability related/data should be certified by the authorized signatory of the bidder firm.
(iii) No exemptions are applicable for MSE registered firms as "Works" are not applicable for exemptions as per MSE guidelines.

Bidder to furnish stipulated documents support of fulfillment of qualifying criteria. Non submission or incomplete submission of documents may lead to rejection of offer.

SECURITY PRINTING AND MINTING CORPORATION OF INDIA LIMITED

TENDER NO: 6000019069

Section X: Tender Form

To,
Currency Note Press, Nashik
A Unit of Security Printing & Minting
Corporation of India Limited
Wholly Owned by Govt. of India
Nashik

Ref: Your Tender document No. 6000019069 dated:

We, the undersigned have examined the above-mentioned tender enquiry document, including amendment No. --------, dated --------- (if any), the receipt of which is hereby confirmed. We now offer to supply and deliver……. (description of goods and services) in conformity with your above referred document for the sum shown in the price schedule(s), attached herewith and made part of this tender.

If our tender is accepted, we undertake to supply the goods and perform the services as mentioned above, in accordance with the delivery schedule specified in the List of Requirements.

We further confirm that, if our tender is accepted, we shall provide you with a performance security of required amount in an acceptable form in terms of GCC clause 6, read with modification, if any, in Section V –"Special Conditions of Contract", for due performance of the contract.

We agree to keep our tender valid for acceptance for a period upto -------, as required in the GIT clause 19, read with modification, if any in Section-III – "Special Instructions to Tenderers" or for subsequently extended period, if any, agreed to by us. We also accordingly confirm to abide by this tender upto the aforesaid period and this tender may be accepted any time before the expiry of the aforesaid period. We further confirm that, until a formal contract is executed, this tender read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us.

We confirm that in case of downloaded Tender Document, we have not changed/edited its contents. We realise that in case any such change is noticed at any stage including after the award of contract, we would be liable to action under clause 44 of the GIT.

We further understand that you are not bound to accept the lowest or any tender you may receive against your above-referred tender enquiry.
We also solemnly declare as under:

SECURITY PRINTING AND MINTING CORPORATION OF INDIA LIMITED

TENDER NO: 6000019069

1. MSMEs Status:

Having read and understood the Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 (as amended and revised till date), and solemnly declare the following:

(a) Company /Partnership Firm /Proprietary Concern / Society/Trust / NGO/Others (Please Specify): .....
(b) Micro/ Small / Medium Enterprise/ SSI/ Govt. Deptt. / PSU/ Others: ....
(c) Name of MSME Registering Body (NSIC/ DIC/ KVIC/KVIB etc.): .....
(d) MSME Registration no. (with copy of registration):.....
(e) Udyog Aadhaar Memorandum no.....
(f) Whether Proprietor/ Partner belongs to SC/ ST or Women category.
(Please specify names and percentage of shares held by SC/ST Partners) : .....

2. Make in India Status:

Having read and understood the Public Procurement (Preference to Make in India PPP_MII) Order, 2017 (as amended and revised till date) and related notifications from the relevant Nodal Ministry/ Department, and solemnly declare the following:

(a) Self-Certification for category of supplier:
- Class-I Local Supplier/
- Class-II Local Supplier/
- Non-Local Supplier.

(b) We also declare that
- There is no country whose bidders have been notified as ineligible on reciprocal basis under this order for offered product, or Tender Form

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- We do not belong to any Country whose bidders are notified as ineligible on reciprocal basis under this order.

3. Restrictions on procurement from bidders from a country or countries, or a class of countries under Rule 144 (xi) of the General Financial Rules 2017 having read and understood the Order (Public Procurement No. 1) issued vide F.No.6/18/2019-PPD dated 23rd July 2020 (and its amendments if any) by Department of Expenditure, Ministry of Finance under the above provision and solemnly declare the following:

- We do not belong to any Country whose bidders are notified as ineligible under this order

4. Debarment Status: Please state whether business dealings with you currently stand suspended/ banned by any Ministry/ Deptts. of Government of India or by any State Govt:

- Yes (with period of Ban)
- No, We, solemnly declare that neither we nor any of our affiliates or subsidiaries– including subcontractors or suppliers for any part of the contract– do not stand declared ineligible/ blacklisted/ banned/ debarred by any Government Agency anywhere in the world, for participating in its tenders, under that country's laws or official regulations.

5. Penalties for false or misleading declarations: I/we hereby confirm that the particulars given above are correct and complete and also undertake to advise any future changes to the above details. We understood that any wrong or misleading self-declaration by us would be violation of code of Ethics and would attract penalties as mentioned in this tender document, including debarment.

.....
(Signature with date)
.....
(Name and designation)
Duly authorized to sign tender for and on behalf of
.....
.....

SECURITY PRINTING AND MINTING CORPORATION OF INDIA LIMITED

TENDER NO: 6000019069

SECTION XI: Price Schedule

SUMMARY OF PRICE SCHEDULE (FOR INDIAN BIDDERS): PRICES SHOULD BE ON FOR, CNP, NASHIK ROAD BASIS.

TENDER NO.6000019069

As per CPP Portal

TENDER NO : 6000019069

SECTION XII: VENDOR DETAILS
SECTION XIII: BANK GUARANTEE FORM OF EMD
SECTION XIV: MANUFACTURER'S AUTHORIZATION FORM
SECTION XV: BANK GUARANTEE FORM FOR PERFORMANCE SECURITY
SECTION XVI: CONTRACT FORM
SECTION XVII: LETTER OF AUTHORITY FOR ATTENDING PRE BID CONFERENCE / BID OPENING
SECTION XVIII: PROFORMA OF BILLS FOR PAYMENTS
SECTION XIX: NEFT MANDATE
SECTION XX: INTEGRITY PACT
Please CLICK the link for further details
https://www.spmcil.com/wp-content/uploads/2024/03/SecXII-XX-PM-3.0-2024-1.pdf

TWO BID, SINGLE STAGE (TWO PACKETS) TENDER BIDDER'S CHECK LIST BEFORE TENDER SUBMISSION

Part I: - TECHNO-COMMERCIAL BID

Sr. No.	Tender Submission Check Points	Check before submission Tick (√)
1	EMD FEE	
2	Tender Document duly Seal & Signed	
3	Term of Delivery :- FOR, CNP Nashik road, duly unloaded	
4	Tender Validity 120 days as per the tender	
5	Technical Specification –Section VII as per tender	
6	Submit Manufacturer's Authorization form (As Applicable)	
7	Accept the Warranty clause as per tender (As Applicable)	
8	Submit the documents as per Qualification / Eligibility criteria – Section IX (As Applicable)	
9	Fill Tender Form – Section X duly seal & sign (Without mentioning price)	
10	Delivery Period: Acceptance of delivery period as per Section VI of tender Document.	
11	Blank price schedule format as per Section XI indicating 'XXXX'	
12	Power of Attorney for signing the bid document and contract, if awarded.	
13	Section II - General Instructions to Tenderer's (GIT)	
14	Section IV - General Conditions of Contract (GCC)	
15	Section XII to XX of Tender Documents	

Part II: - PRICE BID

Sr. No.	Tender Submission Check Points	Check before submission Tick (√)
1	Price Bid as per Section XI (Price including all taxes & other charges)	

..... (Bidder's Seal & Sign)

Annexure-I